SUSTAINING QUALITY IMPROVEMENT IN UK HIGHER EDUCATION THROUGH EFFECTIVE MANAGEMENT OF BEST PRACTICES

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ABSTRACT

This Doctoral Thesis raised very important and yet controversial issues relating to the strategic role of 'Quality' in the future development of publicly funded higher education institutions (HEIs). The philosophical and empirical underpinnings of these issues relate to the *efficiency* and *effectiveness* of alternative approaches for improving Academic Quality. The Thesis provides an alternative *holistic* and *integrated* Conceptual Model, which incorporates a composite definition of 'Academic Quality'. It depicts Excellent HEIs as those with the ability to meet *internal* and *external* demands for quality improvement, by achieving a *sustainable* balance between the forces for *autonomy* and *accountability* to stakeholders. It reveals variability in respondents' *ontological* and *epistemological* assumptions, which reflects on the balance between *theory* and *practice*. This *theory-practice* linkage underpins this researcher's mindset of *critical realism, pragmatism* or *coherentism* as espoused by Tashakkori and Teddlie (1998), Professors Evers and Lakomski (2001). The adoption of a mixed perspective on *validity*, *reliability* and *generalizability* in this thesis complements the positivist deductive approach adopted by Professor Gopal Kanji and Doctor Abdul Tambi in their study of TQM in HEIs (Kanji and Tambi, 2002).

Quantitative and Qualitative Analysis of 42 Questionnaires, over 30 Interview Transcripts, and Documentary Evidence of Practice, led to the identification and hierarchical categorization of *Critical Success Factors* (CSFs). The analysis made use of a system of codes, percentage scaled response scores, and simple test statistics. The Osseo-Asare Scoring Mechanism coupled with the notion of Best Practice Gaps (BPGs) were used in the categorization of quality management practices into 'Weak', 'Good', 'Best, and 'Excellent' under each CSF. A general Theory of academic quality management was created by a forensic examination of the nature of the probabilistic associations between CSFs and Best Quality Management Practices, resulting in the synthesis of academic quality management principles and concepts from which fundamental philosophical and empirical assumptions were derived. The principles, concepts, and assumptions represent a *holistic* and *integrated* approach to quality in terms of comprising of elements from a wide range of alternative theories of educational management and leadership. This Thesis' major contributions to knowledge, include the introduction of: The notion of Best Practice Gaps (BPGs); The Osseo-Asare Scoring Mechanism; The composite definition of Academic Quality; The multi-dimensional definition of Managerial Leadership for academic quality; The generic Theory and Model for academic quality management; and several specific frameworks and models for effective management of academic quality are also some of the by-products from the Thesis. Eight sets of practical recommendations for sustaining academic quality have been outlined; and the major Areas for Further Research at a post-doctoral level include:

- *Piloting the Model at the University of Derby and at Penn State University, as part of a Comparative Study on the Model's acceptability and applicability.*
- *Piloting the Model in UK HEIs, which are adopting the EFQM Excellence Model, in order to assess the Model's compatibility with the EFQM framework.*
- *Application of Kanji's Methodology to determine Performance Indices for each 'autonomy' and 'accountability' criterion, and to calculate the Academic Excellence Index for UK HEIs in this Thesis.*

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I am hugely indebted to all those individuals who so willingly gave of their time and experiences and to those who agreed to allow me to use material from their institutions. Without their help and encouragement this Doctoral Research Thesis would not have been possible. This Thesis is about *Academic Quality Management Best Practices;* and I have been fortunate in learning of such a diverse and interesting selection from Cambridge, Oxford, London, Durham, Manchester, Birmingham, Reading, Exeter, Essex, Warwick, Loughborough, Surrey, Derby, Sheffield Hallam and other universities in the United Kingdom. In addition to practices from Penn State University in the United States of America, the University of St Gallen, and the University of Applied Sciences in Switzerland.

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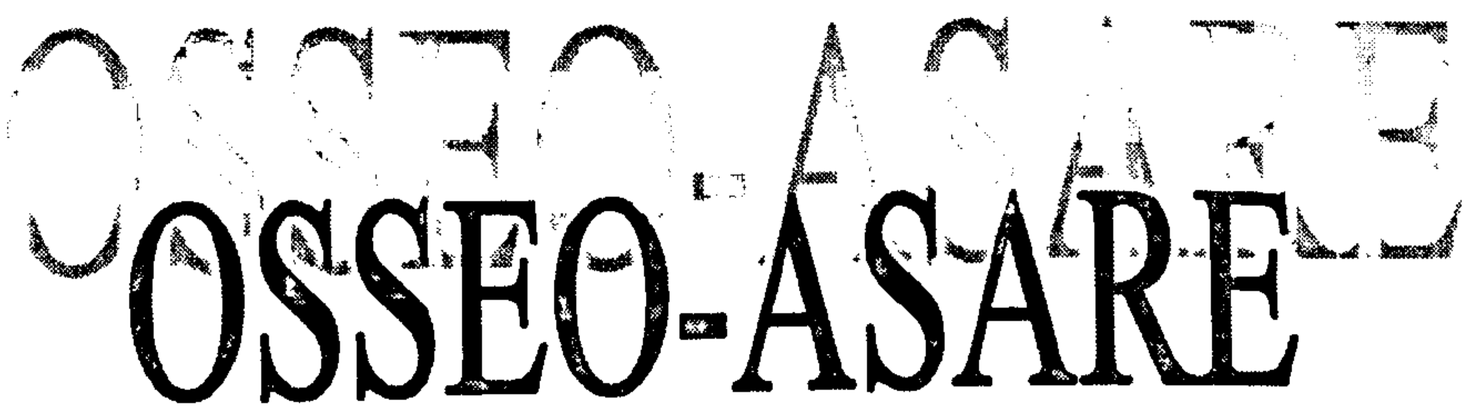
"If I have been able to see further than others, it is because I have stood on the shoulders of giants - Isaac Newton"

A. Ernest Osseo-Asare Jr.
Doctor of Philosophy
July 2004

DEDICATION

Grand Parents TSUBA, MINA, ASARE, PARTRICK; Parents FRANCIS EUSTACE YAO ASARE, PAULINE YAA PARTRICK; Uncles PAPA DANKWA, MANNASSAH CHRISTOPHER OSSEO-ASARE, GEOFFREY BOATENG, ROBERT NDU



*Abena, Masi, Dankwa, Ernest, Sam * Dorothy, Pauline, David * Kwame, Efua, Nana Aba * Kwame, Elsie*

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LIST OF ABBREVIATIONS

1.	BPGs	Best Practice Gaps
2.	BPR	Business Process Re-engineering
3.	CSFs	Critical Success Factors
4.	DfES	Department of Education and Skills
5.	EFQM	European Foundation for Quality Management
6.	EPGs	Excellent Practice Gaps
7.	EQA	European Quality Award
8.	EQUIS	European Quality Improvement Systems
9.	HE	Higher Education
10.	HEFCE	Higher Education Funding Council for England
11.	HEIs	Higher Education Institutions
12.	ISO	International Standards Organization
13.	MBNQA	Malcolm Baldrige National Quality Award
14.	PDCA	Plan-Do-Check-Act
15.	QAA	Quality Assurance Agency for Higher Education
16.	RADAR	Results-Approach-Deploy-Assess-Review
17.	RAE	Research Assessment Exercise
18.	SPSS	Statistical Package for the Social Sciences
19.	SQM	Strategic Quality Management
20.	THES	Times Higher Education Supplement
21.	TQM	Total Quality Management
22.	TQA	Teaching Quality Assessment
23.	UK	United Kingdom
24.	USA	United States of America

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OSSEO-ASARE JR., A. E. AND LONGBOTTOM, D. (2001) "Is the EFQM Model Suitable for Quality Management in UK Higher Education Institutions?" in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 & TQM: Integrated Management,* pp. 589-596, 17-19 April, Ayr, Ayrshire, Scotland, UK.

OSSEO-ASARE JR., A. E. AND LONGBOTTOM, D. (2002) "The Need for Education and Training in the use of the EFQM Model for Quality Management in UK Higher Education Institutions", *Quality Assurance in Education,* Volume 10, Number 1, pp. 25-35, MCB University Press, Bradford, UK, **www.emeraldinsight.com**

OSSEO-ASARE JR., A. E., LONGBOTTOM, D. AND MURPHY, W. D. (2003) An Empirical Research into Best Practices for Sustaining the Effectiveness of Managerial Leadership, - *a paper accepted for presentation at a TQM Conference in Dubai.*

LONGBOTTOM, D., OSSEO-ASARE JR., A. E., AND MURPHY, W. D. (2004) "Real Quality: a discourse analysis to assess the underlying values in quality", in *Proceedings of the Sixth International Conference on ISO 9000 & TQM,* April, Bangkok, Thailand.

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CHAPTER SIX

chapter|one

INTRODUCTION AND CRITIQUE OF EXISTING LITERATURE

Chapter One provides an introduction to the Thesis and critiques existing literature in order to identify research gaps as the basis for formulating research problems and opportunities, deciding research objectives and targets, and designing research questions and instruments. It comprises of two sections. The first Section [1.1] identifies the strategic reasons for researching quality in higher education at the doctoral level. The second, Section [1.2] provides a critical review of the internal, external, and competitive environmental factors driving demand for higher quality in UK higher education institutions, and of alternative models for assessing, assuring, and managing academic quality. It also establishes the functional relationship between 'efficiency' and 'effectiveness' of quality management practices, provides a definition of the broad research gap, and a statement of the primary and secondary research objectives. An outline of the structure of the thesis is also included. The overall aim is to provide a critical commentary which exposes the contradictions and the elements within quality management practices in higher education, which will and will not inform the fieldwork, thereby, setting the stage for Primary Data Collection, Presentation, and Analysis.

"If productivity can be measured by the doubling of student numbers and the trebling of research activity against a 40 per cent cut in resources, UK Higher Education plc needs no lessons in good management " (THES, 2003a:14)

1.1

Strategic Reasons for Researching Quality in Higher Education at the Doctoral Level

"There is a considerable urgency for the development of an appropriate model for quality in higher education" (Srikanthan and Dalrymple, 2001:566)

This Section introduces the doctoral research thesis by reviewing strategic reasons for conducting research at the doctoral level on quality in higher education; followed by Section [1.2], which provides a critical review of existing literature. The title of this thesis *Sustaining Quality Improvement in UK*[1] *Higher Education through Effective Management of Best Practices* raises a wide range of very important yet controversial issues relating to the strategic role of 'quality' in the development of publicly-funded higher education institutions (HEIs) in the UK. These issues range from *theoretical* or *philosophical* debates about the *meaning* and *relevance* of 'quality' in a higher educational environment to *practical* or *empirical* concerns about the *effectiveness* of alternative approaches for measuring, improving, and managing academic[2] quality. The ground breaking works of Professor Gopal Kanji and Doctor Abdul Tambi in the late 1990s on Total Quality Management (TQM) in HEIs in the UK, USA and Malaysia, contained in the book titled: *Business Excellence in Higher Education* (Kanji and Tambi, 1999; 2002), points to two concerns:

a. *First, that until the controversy surrounding the above debates and concerns are dealt with, serious doubt remains about the ability of individual institutions to determine a long-term role for quality in higher education.*

b. *Second, that the major challenge for knowledge production in an increasingly complex higher educational environment is about how to achieve and sustain desired levels of quality and performance improvement most of the time and on a continuous basis.*

[1] *UK = United Kingdom; comprises of England, Scotland, Wales, and Northern Ireland - see Bibliographical Notes on pp. 420.*
[2] *'Academic' comprises of Teaching and Learning (Biggs, 2003), Scholarship and Research (Bushaway, 2003;DfES, 2003:23,46)*

These controversy and challenge raise fundamental questions about the ability of managers and leaders to create the enabling environment for 'sustaining' teaching, learning, scholarship, and research quality improvement. To answer these questions satisfactorily, there is a need for further research into academic quality at all levels – in particular at the doctoral level - to provide more insight into the nature of the controversy and challenge and how they impact on quality management practices.

A. Overall Purpose or Mission of Higher Education in the 21st Century

Existing literature on *strategic management* and *strategic quality management* suggest that the first step in the 'strategic quality planning process' is a review of the overall purpose of the organisation in question (Garvin, 1988; Thompson, 2003:93). The overall purpose of UK HEIs is explicitly stated in the Government White Paper titled: *The Future of Higher Education,* which was presented to Parliament in January 2003 by Charles Clarke (Secretary of State for Education and Skills). This is to provide the skilled manpower required for economic and social development by transforming students into graduates to meet the human resource needs of private and public sector organisations, and by pushing forward the frontiers of knowledge (DfES, 2003:2-10, 23, 46). Charles Clarke in his presentation, emphasised the need for continuous improvement in teaching and research functions – as revealed in the statement below:

> *"First, the expansion of higher education has not yet extended to the talented and the best from all backgrounds. In Britain today too many of those born into less advantaged families still see a university place as being beyond their reach, whatever their ability. Second, we have to make better progress in harnessing knowledge to wealth creation. And that depends on giving universities the freedoms and resources to compete on the world stage. To back our world-class researchers with financial stability; To help turn ideas into successful businesses; To undo the years of under-investment that will result in our universities slipping back" (Clarke, 2003:2)*

The first part of the statement relates to continuous improvement of the 'quality' of teaching and learning'; and the second part, to continuous improvement of the 'quality' of research and scholarship'. This suggests that the principle *of continuous quality improvement* - and by implication 'quality' - is central to the achievement of the overall purpose of HEIs. The rationale for this research study is to evaluate the extent to which quality management concepts and principles including 'continuous improvement' are taking seriously by academics and practitioners. The writings of Biggs (2003) and Bushaway (2003) suggest that there is controversy over the central role of *quality* in achieving institutional mission objectives. This controversy stems

from the recognition that, the weakening of the associations between 'teaching and learning'; 'teaching and scholarship'; 'teaching and research'; 'research and scholarship'; and 'research and learning' tend to weaken the ability of institutions to sustain quality improvement on a continuous basis. Even though the UK Government's Higher Education policy-makers are aware of the strategic importance of these associations they find it more prudent to pursue a policy of selective allocation of funding, to the detriment of efforts to sustain quality improvement in all areas of academic activity simultaneously (DfES, 2003:39). Some politicians including Barry Sheerman, chair of the Commons Education and Skills Select Committee spoke in defence of strengthening the partnership between *teaching* and *research* rather than separate them through funding policy implementation (THES, 2003b:2). The fact that the Government in principle recognised that there is a linkage between *teaching* and *research* appears to suggest that selective funding policy implementation has the potential to weaken integration between different academic activities. This doctoral thesis seeks to encourage an integrated approach to academic quality management.

B. Commitment to Modernisation through Cost-Effectiveness

According to Kerr (1987:127) the advent of a Conservative administration in 1979 marked a dramatic change in government policy from a long established commitment to preserving institutional *autonomy* to a commitment to modernization through *cost-effectiveness*. Today's New Labour Government has essentially added a socio-economic dimension to the modernization agenda by its objective to widen participation and student choice 'forcing' institutions to adopt a more deliberate strategy for meeting students' needs and expectations (DfES, 2003:2-3). This demonstrates that as far as publicly funded HEIs are concerned, Government policy and strategy for higher education is one of the predictable external CSFs impacting on institutional quality improvement decisions. This is coupled with increasing pressure on academics and institutions as a whole to harness information and communication technologies (ICTs) in response to new requirements of external *accountability* (Brennan and Shah, 2000:6-7; Biggs, 2003:213).

The works of Green (1994:9) and Perry and Smart (1997) suggest that government policy of widening participation has led to an increase in student numbers. This along with steady decline in unit funding over a period of years, have made it more difficult

for UK HEIs to sustain improvement in the quality of teaching and research. A situation which according to Perry and Smart (1997) is made worse by the fact that with increasing rates of participation, the nature of the student body has become more varied in relation to their educational backgrounds and innate talent. It suggests that teaching will have to be highly skilled and appropriate to meet the diverse needs of the student population. It also suggests that the nature of teaching and learning will need to become varied, versatile, and of higher quality. The linkage between teaching and research further suggests that any adverse impact of widening participation on teaching activities will also impact on research activities (THES, 2003b:2).

The White Paper on higher education revealed that the increase in student numbers have led to a decline in staff-student ratios from just over 1:10 in 1983 to 1:18 in 2000, resulting in steady decline in the quality of students' learning experience. This turns to mean that students write fewer assignments and have less face-to-face contact with staff. (DfES, 2003:15). The decline in staff-student ratios is partly explained by the statistics from the Higher Education Statistics Agency (HESA, 2001) which shows that only 9% of academic staff are engaged in a teaching-only function (see Figure 1.1). This is complicated by the fact that the proportion of academic staff with research-only function is said to be rising steadily (THES, 2002a:26-27).

Figure 1.1

This in part may be due to the fact that academic staff recruitment has steadily deteriorated since 1998, and there are continuing concerns about the ability of institutions to recruit, retain and reward researchers who also teach (DfES, 2003:15). This raises questions about UK HEIs' commitment to sustaining teaching and research excellence simultaneously.

The above introduction to Section [1.1] suggests that for HEIs to survive in an increasingly competitive higher education industry – in pursuit of their *mission* - there is a need for them to seek to meet government and other stakeholders' requirements for *accountability.* This researcher is exploring the role that an integrated approach can play in achieving and sustaining academic quality improvement. The next sub-section examines the nature of the controversy over the definition and relevance of the notions of 'quality' and 'excellence' in higher education - from their origins in the private sector to the public sector, and their increasing application to academic and non-academic functions in UK HEIs.

1.1.1. The Nature of the Controversy over the Meaning and Relevance of Quality in Higher Education

This sub-section takes a look at the nature of the controversy and conflict surrounding the meaning and relevance of 'quality', and critiques the philosophical and empirical assumptions underpinning the meaning and relevance of 'quality' in higher education. The term *quality* has evolved from being a basic attribute of a product or service in the mid-1990s to a standard of *excellence* expected from a product or service by all consumers or customers. Collins' (2000) *English Dictionary: New Edition for the 21st Century* and Webster's (2002) *Dictionary and Thesaurus, New Concise Edition* refer to the term *quality* as a noun, and defined it as an essential 'attribute', a distinguishing characteristic feature of a product or service, and as a degree or standard of 'excellence'. Slack (1991) and Slack et al. (1998:52, 634), however, referred to *quality* as an active verb and defined it as 'doing things right'; thereby, relating 'quality' to operational *efficiency* in either a *manufacturing* or a *service* environment. Collins (2000), and Webster (2002) place emphasis on the *tangible* and *intangible* attributes of the 'output' of an operation – a definition of *quality* driven by 'results' - whereas, Slacks et al. (1998) place emphasis on the 'operation' function itself – a definition of quality driven by 'activity'. These two definitions if combined clearly suggest a definition of *quality* based on 'systems thinking', which considers the

quality of *input*, the quality of *processes* and the quality of *outputs* from either a manufacturing or service operation. This view is supported by the work of Beckford (2002) which suggests that from a systems perspective, *quality* as a general terminology, may be defined as the essential attributes or distinctive characteristic features of *inputs*, *processes* and *outputs* of an entire operation. Some academics and practitioners including the so-called quality gurus have summarised these attributes and features of *inputs*, *processes* and *outputs* into 'broad approaches to quality', which will be reviewed later under this sub-section.

The writings of Schaffers and Thomson (1992:80-89), and Brennan and Shah (2000), suggest that 'quality' in higher education, is frequently a source of controversy and conflict - primarily, because it is an elusive term whose meaning is difficult to articulate. According to Brennan and Shah (2000:18), the difficulty in articulating the *meaning* of 'quality' has led to failure by most national quality bodies in Europe including the UK to come up with a 'composite' definition of 'quality' that would achieve legitimacy with stakeholders in higher education. This failure has led to a situation where the most powerful stakeholder group applies its own definition of quality in order to achieve its stated aims and objectives (Brennan and Shah, 2000:18). This poses questions about the extent to which 'quality' defined in terms of the quality of *inputs*, *processes* and *outputs* is applicable in a higher education environment. One of the aims of this doctoral research thesis is to examine the various definitions of 'quality' proposed by Garvin (1984) and Harvey and Green (1993) in an attempt to explore the possibility of developing a 'composite' definition of 'academic quality' which incorporates elements from the differing perceptions of stakeholders.

A. Quality as a Convergence of Diverse Stakeholder Perceptions

Professor David Garvin (1984), an expert on *quality* in private sector organisations summarised various 'definitions of quality' into five 'approaches to quality': (1) Transcendent; (2) Manufacturing-Based; (3) User-Based; (4) Value-Based and (5) Product-Based. A decade later, Harvey and Green (1993) - experts on quality in higher education - developed a framework identical to that of Garvin (1984) which identified five broad 'approaches to quality' (see Table 1.1, below). Table 1.1 identifies these broad approaches as follows: (1) 'Excellence or Exceptional', (2) Perfection; (3) Fitness for Purpose; (4) Value for Money; and (5) Transformation.

Table 1.1
Private Sector and Public Sector Definitions of Quality
Source: Garvin (1984), Harvey and Green (1993)

	Private Sector Definition of Quality	Public Sector Definition of Quality
1	Transcendent	Excellence or Exceptional
2	Manufacturing-based	Perfection
3	User-based	Fitness for Purpose
4	Value-Based	Value-For-Money
5	Product-based	Transformation

These works strongly suggest that 'quality' in higher education, perhaps should not have a single meaning or approach, but a convergence of ideas, concepts, principles, meanings and approaches held together in an integrated manner in order to sustain continuous quality improvement.

Quality as 'Excellence' or 'Exceptionalism'

Table 1.1 above appears to suggest that Garvin's (1984) 'transcendent' approach may be equated to Harvey and Green's (1993) 'excellence' approach since both emphasise 'exceptionalism' by defining 'quality' in terms of the 'best possible' outcomes with reference to product or service specification. This according to Jensen (2000:37-57), suggests that 'quality' defined in terms of 'excellence', 'exceptionalism' and 'transcendence' has more to do with *optimisation* than *maximisation* of 'outcomes'. Hermel and Ramis-Pujol (2001:273) argued that historically the concept of quality as 'excellence' has been presented from the different perspectives of art, literature, and architecture, and associated with different forms of performance. This prompts questions about whether or not 'quality' defined in terms of 'excellence', 'exceptionalism' and 'transcendence' was not just a permanent 'open-ended' question. Hiley (2000:139-147) also asked whether or not such terms were not simply 'aspirational' targets, which in reality cannot be achieved under any circumstances.

Tom Peters and Robert Waterman in their book: *In Search of Excellence,* formalised the concept of 'excellence' into organizational practice (Peters and Waterman, 1982). They defined an 'excellent' or 'exceptional' organization as one having the strengths of innovation, ability to change and a leadership that excels in both values and action better than the competition. They identified Customers, People, and Innovation as the key attributes of 'excellence' – and therefore of 'quality' (Peters and Waterman, 1982, 1992). It clearly suggests that a single measure is not enough to define 'excellence' or 'quality'; rather a balanced mix of measures derived from stakeholder needs and

expectation ought to be used (Hermel and Ramis-Pujol, 2001:279; Aubert and de Gaulejac, 1992; Bartoli and Hermel, 1989). This might have led Peter Senge to suggest that 'excellence' or 'quality' should be defined and implemented in terms of 'systems thinking', where application of 'effort' would bring about 'results' in a certain expected way (Senge, 1990a; 1990b). In support of Senge's views, Liston (1999:11) argued that 'quality' and 'excellence' are not synonymous, and that 'quality' is the *means* by which 'excellence' as an *end* can be achieved.

Quality as 'Perfection'

The traditional, classical concept of *quality* equates 'quality' with 'perfection' - defined in terms of 'conformance' to product or service specifications (Harvey and Knight, 1996). The works of Harvey and Green (1993:8-35), and Biggs (2003:266-267) suggest that governments of all persuasions continue to use the notion of quality as 'perfection' as a means of making public service providers more *accountable* and responsive to the needs of consumers. This approach to quality is consistent with Garvin's (1984) *manufacturing-based* approach, because it originates from notions of quality control - concerned with making products or providing services that are 'free of errors' and conform precisely to their design specification. It is however, a perception of quality that is essentially static or retrospective, and does not adequately reflect future changes in the environment (Biggs, 2003:266). Some writers suggest that it quality as 'perfection' is based on *exclusivity,* which provides products or services that are flawless, distinctive and special and confers status on owners or users (Pfeffer and Coote, 1991; Green, 1994:13-14; Rowley, 1996). It sets extremely high standards achievable at great cost, and out of reach of the majority of the population.

Quality as 'Fitness for Purpose'

Alternatively, quality as 'fitness for purpose' is an approach preferred by most analysts and policy-makers. It is consistent with Garvin's (1984) 'user-based' approach, because both demonstrates concern not only for adherence to specification as required by the definition of quality as 'perfection' but also the appropriateness of that specification for the customer (Green 1994:15). This 'customer-oriented' definition takes a developmental view of 'quality' in recognizing that the purpose of teaching and research services may change over time, thus requiring periodic re-evaluation of the appropriateness of the objectives of these services (Barnett, 1992;

Harvey and Green, 1993). It is an approach which requires that academic services meet the needs and expectations of students and of other external stakeholders (Ball, 1985; Billig, 1986; Green 1994:15; QAA, 2003a). This helps to determine what the specification for a teaching and research services should be, making it important for students and other stakeholders to clearly articulate their needs and expectations (Green, 1994:15; Rowley, 1996 Oakland, 2003). UK HEIs including Cambridge and Derby define quality in terms of 'fitness for purpose' (Cambridge, 2003b; Derby, 2003b).

Quality as 'Value-for-Money'

Quality as 'value-for-money' is a more important criterion for governments and other funding bodies, who actively seek the same outcome with a lower cost provider of higher education (Harvey and Knight, 1996). Today, more than ever, UK public sector organizations including HEIs have to deliver the highest quality services in order to maximise as much value as possible from the tax pound that funds them - an objective pursued by the UK Labour Government's 'Best Value' agenda (DfES, 2003). A key requirement of this agenda is continuous performance improvement, requiring each HEI to continuously improve with respect to the range, quality and cost-effectiveness of its provision, with an emphasis on customer focus (George et al., 2001:573). According to Dale (1999:129-130), the overall aim of the philosophy of the 'value-for-money' or 'value-based' approach to quality is both about cost reduction, stakeholder satisfaction and delight. Slack et al. (1998), argued that quality as 'value-for-money', takes the definition of quality as 'perfection' a stage further by relating quality to 'cost' and 'price'. They contended that quality should be perceived in relation to 'price paid by recipients of quality' or 'cost borne by providers of quality'. This suggests that Garvin's (1984) 'value-based approach' is similar to Harvey and Green's (1993) 'value-for-money' approach, since both demand that *quality* satisfies the requirements for public *accountability* (Biggs, 2003:267).

Quality as 'Transformation'

The works of Pring (1992), Barnett (1992), Harvey and Green (1993), and Harvey and Knight (1996), suggest that the definitions of quality in terms of 'perfection', 'fitness for purpose', and 'value for money', give a narrow view of quality and do not reflect the long-term *mission* of higher education. They proposed a *holistic* definition of

quality as 'transformation' of students from one state of mind to another, based on the belief that teaching as a service transforms students by enhancement and empowerment (Biggs, 2003:267). They argued that in the context of higher education, 'transformation' involves not only measurable outcomes, such as examination performance, but also cognitive *transcendence* with the provider doing something 'to' the student rather than just doing something 'for' the student (Harvey and Green, 1993). This holistic definition of quality is similar to Garvin's (1984) 'product-based' approach because both view quality as a precise and measurable set of characteristics built into a 'product' which in this case is a 'student' or 'learner' in order to satisfy the customer e.g. a potential employer.

Brennan and Shah's 'Quality Values'

Brennan and Shah (2000:14) identified 'four' dimensions or values of quality in higher education, that may be applied to the 'five' definitions of quality by Harvey and Green (1993) (see Table 1.2 below). First, the 'traditional academic values' dimension focuses on the subject field – i.e. knowledge and curricula. They are associated with professional authority and control based on hierarchical structures with rigid socialization and induction processes. Conceptions of 'academic quality', are based on subject affiliation and vary across the institution. This traditional dimension remains the most significant in quality assessment although they seem likely to be challenged increasingly in the future (Brennan and Shah, 2000:14).

Table 1.2
A Hypothetical Matrix of Different Perceptions on Quality in Higher Education
Source: Based on the works of Garvin (1984), Harvey and Green (1993), and Brennan and Shah (2000)

Definitions of Quality in Higher Education	**Dimensions of Quality in Higher Education**			
	Academic Value	Managerial Value	Pedagogic Value	Employment Value
Excellence Perfection Fitness for Purpose Value For Money Transformation	Subject-Field i.e. Knowledge and Curricula	Effective Management of Processes, Procedures and Structures	Effective Management of Teaching and Research Skills and Practices of Staff	Meeting the Requirements of Employers as Customers

Second, 'managerial values' dimension, focuses on the institution as a whole, and is concerned with processes, procedures and structures. It assumes that 'higher quality' results from 'good management' (Brennan and Shah, 2000:14). Quality characteristics are thus regarded as invariant across the whole institution - applying equally to all functions and activities in academic and non-academic areas (Brennan and Shah, 2000:14). Third, 'pedagogic values' focus on 'people', their 'teaching skills' and

'classroom practice'. These values are strongly associated with training and staff development, and like managerial values, quality characteristics apply to academic, administrative and support-service activities at all levels of the institution. The major drawback of pedagogic values is overemphasis on 'delivery' and little emphasis on the 'content' of education (Brennan and Shah, 2000:14). Fourth, 'employment values', according to Brennan and Shah (2000:15) focus on 'employment'. They argued that such values place a lot of emphasis on graduate output characteristics, standards and learning outcomes. It is an approach, which takes account of 'customer' requirements – in this case the customer is the employer of graduates. It tends to take into account both subject specific and core characteristics of high quality education. Therefore, *quality* comprises of some features which are invariant across the institution and some which vary according to subject (Brennan and Shah, 2000:15).

In summary, the literature appears to suggest that conceptions of quality in individual institutions will entail different definitions and several types of quality values. As a result the balance between the different types of quality values will differ in practice, as suggested by the hypothetical matrix in Table 1.2 above, which attempts to match Harvey and Green's (1993) definitions to Brennan and Shah's (2000) dimensions. The challenge to quality managers is how to achieve the right balance of perceptions and values of quality, which reflect the needs and expectations of all stakeholders, in particular students and potential employers as customers. The alternative perceptions of 'quality' highlighted above confirms that 'quality' in higher education should not have a single meaning or approach but a convergence of ideas, concepts, principles, meanings and approaches, held together in an integrated manner in order to meet the requirements of different stakeholders. The rationale for this doctoral research study is to investigate the extent to which a holistic or composite meaning of quality in the context of education can be incorporated into an academic quality management model.

B. The Evolution of the Concept of Managing Quality

The 19th century saw the *industrial revolution*, the early 1980s brought about the *computer revolution*, and the mid-1990s witnessed the emergence of a *quality revolution* (Dale, 1999:24). The 'quality revolution' was characterised by the evolution of quality from *inspection-based* approach to a *prevention-based* approach to measuring, improving, assuring and managing quality in both private and public

sector organizations including higher education (Ho and Fung, 1994:24; Dale, 1999:4; Biggs, 2003). Beckford (2002) and Oakland (2002) in his book titled *Total Organisational Excellence* argued in support of the view that *quality* is no longer an optional extra to a product or service but an essential attribute. This attribute they argued, is increasingly demanded by internal and external customers, and therefore ought to be linked to 'organisational excellence', which they defined in terms of operational performance effectiveness and organisational success.

According to Dale (1999:4), since the late 1970s the approaches to ensuring that finished products and the services delivered, have the desired tangible and intangible attributes i.e. 'quality'; have evolved from *inspection-based* and are increasingly becoming *prevention-based* (see Table 1.3, below). Table 1.3 shows that the *focus* of 'inspection-based' activities is to 'check' or 'inspect' the 'outputs' from processes, to see if they have the desired attributes - no attempt is made to correct any variation in output attributes, rather the output is 'discarded' and in the context of higher education 'excluded'. 'Control-based' activities take 'inspection-based' activities a little further, by ensuring that attributes of 'outputs' from a process are consistent with attributes of 'inputs'; attempt is then made to correct any variations detected (Dale, 1999:4-7).

Table 1.3
The Evolution of the Concept of Managing Quality in UK Higher Education
Source: Based on the works of Garvin (1988), Dale (1999) and Kanji and Tambi (2002)

OPERATIONAL MANAGEMENT →				**STRATEGIC MANAGEMENT**
INSPECTION	**CONTROL**	**Critical Success Factors**	**ASSURANCE**	**MANAGEMENT**
Inspect-In	Control-In	*Focus*	Build-In	Manage-In
None-Very Little	After the Event Action	*Corrective Action*	After-During the Event	Before-During-After
None-Very Little	Little Involvement	*Top Leadership Involvement*	Some Involvement	Considerable Involvement
Inspection-Based	**Detection-Based**	**Structures and Systems**	**Prevention-Based**	**Prevention-Based**
Reactive	Reactive	Improvement Philosophy	Retrospective	Prospective
Task-centred	Task-centred	Improvement Approach	People-centred	People-centred
QAA-Subject Review	QAA-Subject Review	Improvement Models	QAA, HEFCE	TQM, EFQM, Kanji-BEM

'Assurance-based' activities focus on 'building' desired 'tangible' and 'intangible' attributes into higher education products and services. This is achieved by further enhancing 'inspection' and 'control-based' activities; ensuring that feedback

mechanisms are in place to ensure that 'outputs' reflect the desired attributes of 'core processes'; and ensuring that these processes are managed more effectively to deliver desire attributes in outputs. The central focus of 'management-based' activities is prevention through effective planning and control of inputs, processes and outputs from the perspective of systems theorists (Dale, 1999:8-9). This offers a more strategic approach to quality than the 'assurance-based' approach; and forms the basis for the development of an alternative academic quality model in this doctoral research thesis. The issues raised here are dealt with in more detail later under Section [1.2].

1.1.2. Summary of the Strategic Reasons for Researching Academic Quality

Section [1.1] provided an introduction to the literature review in Section [1.2] by identifying the strategic reasons for conducting research at the doctoral level on quality in higher education in the United Kingdom. Although a number of long-term reasons for carrying out research at the doctoral levels were given in Section [1.1], 'six' main reasons have been identified as follows:

- *The fact that successive UK Governments and Funding Bodies continue to use 'quality' assessment as the basis for funding allocations suggests that it is in the long-term interest of HEIs to carry out longitudinal study into the quality of teaching and research.*

- *Existing literature suggest that there is considerable urgency in resolving the controversy surrounding the meaning and relevance of quality in public sector organisations including higher education. This is dependent on using effective methods of capturing the perceptions of differing stakeholder groups, in order to improve on the levels of stakeholder satisfaction. Further research is therefore required to establish whether or not a composite definition of academic quality can be developed from the various definitions.*

- *To make it easier for HEIs to be able to match government commitment to modernisation with their own long-term commitment to undergo changes in structure and culture in response to new requirements for internal and external accountability;*

- *To make governments aware of the fact that selective allocation of funding in the long run weakens the linkage between teaching and research, and research and scholarship which impacts on academic quality and academic excellence.*

- *To facilitate the evolution from 'inspection-based' approach to quality to a management-based or 'prevention-based' approach to quality in individual HEIs.*

- *Finally to deal efficiently and effectively with the long-term impact of declining staff-student ratios on efforts to sustain teaching and research quality improvement.*

1.2

A Critical Commentary:
Review of the Environmental Factors Driving Demand for Higher Quality in UK Higher Education

"We seek a partnership between students, government, business and the universities to renew and expand our higher education system for the next generation " (Charles Clarke[3], DfES, 2003:3)

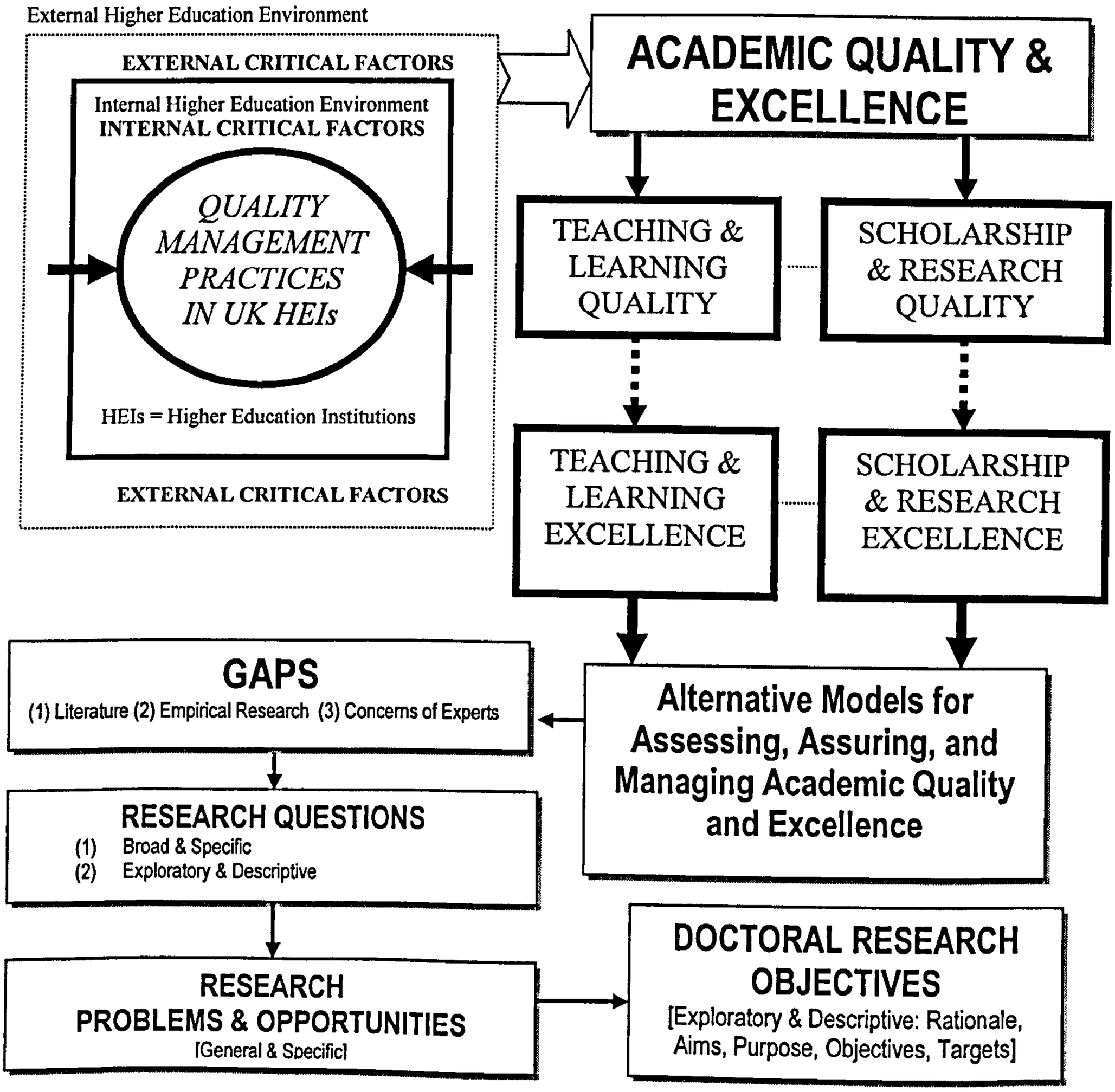
Section [1.2] gives a critical commentary on the issues relating to the strategic impact of external and competitive environmental factors on quality management practices within UK HEIs, to expose the contradictions and the elements which will or will not inform the fieldwork in this research study. It compares alternative models for assessing, assuring and managing academic quality. It also establishes the functional relationship between 'efficiency' and 'effectiveness' of quality management practices. Finally, it provides the context for the doctoral research design and the epistemological basis for adopting critical success factor (CSF) methodology - as espoused by Daniel (1961) and Kanji and Tambi (1999, 2002) – in the collection and analysis of primary data. The aim is to provide an intellectual framework for evaluating the contribution teaching and research quality makes to Academic Excellence.

Several books on management research practices including, Jankowicz (1995), Remenyi et al. (1998), Churchill and Iacobucci (2002), Saunders et al. (2003), and Cohen et al. (2003), consider literature review as an essential part of secondary data analysis, which provides a thorough analytical overview of relevant and up-to-date published works. Figure 1.2, below, shows the general model used in this research thesis to search for relevant and up-to-date data and information. The model helped in the identification of the gaps in the literature; formulating research problems and opportunities; designing the right research questions; setting specific, measurable,

[3] *The UK Labour Government Secretary of State for Education and Skill - White Paper on Higher Education (DfES, 2003:3)*

achievable, realistic, and timely research objectives, in readiness for primary data collection. The literature review is developed thematically, starting with environmental analysis, followed by a review of alternative quality models for achieving Academic Excellence in UK HEIs. For the purpose of this doctoral research thesis, research 'gaps' are defined in terms of perceived or actual 'differences' between quality management theory and practice. In the light of resource constraints the decision was made to follow up on only highly significant research gaps, clearly linked to research questions, problems and objectives (see Figure 1.2, below). Sub-section [1.2.1] below respectively examines the critical factors - in the external, competitive, and internal environment - driving demand for higher quality in UK higher education institutions.

Figure 1.2
A General Model for Literature Review for the Doctoral Research Thesis
Source: Osseo-Asare Jr. 2003



1.2.1. Critical Factors driving Demand for Higher Quality

A recent publication by Professor John L. Thompson on *strategic management* suggests that like any other organisation the *Mission* of HEIs can be achieved if institutions are able to identify the many diverse factors operating inside and outside the higher education industry (Thompson, 2003:267). Table 1.4 below highlights the major sources of environmental influence and the key factors identified by well-known writers and researchers familiar with the UK system of higher education. These include Professor Gopal Kanji the Director of Sheffield Hallam University European Centre for Organisational Excellence; Professor Maurice Kogan the Director of Brunel University Centre for the Evaluation of Public Policy and Practice; and Professor John Brennan the Director of The Open University Centre for Higher Education Research and Information.

Table 1.4
Summary of Sources of Influence and Diverse Internal and External Factors
Sources: Based on Studies on Critical Success Factors from Several References shown in the Table

Note: HE = Higher Education HEIs = Higher Education Institutions

Sources of Environmental Influence	**Diverse factors**	**Key References**
External Environment		
Politico-legal	Funding Allocations	Barnes (1999)
Economic	Diversification of Sources of Funding	Williams (1999)
Socio-cultural	Widening Participation, Social Re-engineering	Ball (1990a; 1990b)
Technological	Information and Communication Infrastructure	Morley (1997; 2001)
Competitive Environment – Industry		
Needs of Students as Customers	Handling Students Complaints, Learning Support	Brennan & Shah (2000)
Staff Performance and Satisfaction	Remuneration, Work Environment	Cuthbert (1999)
Society Results	Regional Regeneration, Environmental Concerns	Watson (1999)
Key Performance Results	Turnover, Funding Levels, Balanced Budget	Henkel & Little (1999)
Internal Environment - UK HEIs		
Academic Leadership for Quality	Vision, Mission, Values, Principles Policy, Strategy,	Bargh et al. (1996)
Quality Improvement Policy & Strategy	Quality Improvement Objectives, Targets	QAA (2002a; 2002b)
Management of Academic Staff	Staff Empowerment, Training and Development	Kogan (1996; 1999)
Resources for Quality Improvement	Resource Acquisition and Utilisation	HEFCE (2003a; 2003b)
Quality Improvement Processes	Continuous Process Improvement	Kanji & Tambi (1999)

According to Harvey (2001:41), these external, competitive, and internal factors manifest themselves in all their day-to-day variations. They involve internal and external stakeholders, and have strategic and operational implications, which impact positively or negatively on the ability of individual HEIs to achieve and sustain desired levels of teaching, learning, scholarship, and research quality improvement. These environmental factors have been categorised by Daniel (1961:111), Boynton and Zmud (1984:17-27) and later by Kanji and Tambi (1999:137) as 'critical success

factors (CSFs)' in terms of the degree of 'criticality[4]' to the achievement of higher performance results. Studies on *CSFs* include Daniel (1961:111-121), Anthony et al. (1976), Rockart (1982:3-13), Leidecker and Bruno (1984:23-52), Boynton and Zmud (1984:17-27), Jenster (1987:102-109), Pinto and Slevin (1989:31-35), Schneier et al. (1992:279-301), Hughes and Chaffin (1996:89-104), and Gowan and Mathieu (1996:173-183). These studies suggest that a CSF may be described as having the following characteristics:

- *They are variables or circumstances originating from either the micro and/or the macro-environment in which an organisation operates;*
- *There is empirical evidence that changes in these variables have historically constrained efforts to achieve long-term success in key performance areas;*
- *The relative importance and effectiveness of these factors in achieving best-in-class or world-class results can be determined based on objective empirical data, and not on speculation;*
- *They are a necessary requirement for creating and sustaining an enabling environment, which promotes a culture for excellence for delivering continuous improvement in internal and external stakeholders satisfaction.*

The notion of CSFs has since been applied by many researchers including - Longbottom and Zairi (1996), Longbottom and Milligan (1999), Neely (1998), Kanji and Malek (1999), Osseo-Asare (2000), Osseo-Asare and Longbottom (2001; 2002), Oakland (1989; 2002), the EFQM (1998; 2003b) for Europe, and the MBNQA (1998; 2003b) in the USA. Studies on CSFs in US higher education include Burello and Zadnik (1986:367-377) and Nelson (1991:503-521). UK studies include Clayton (1995:593-601), Osseo-Asare and Longbottom (2001:589; 2002:26), and the extensive survey by Kanji and Tambi (2002) on HEIs in the US, UK and Malaysia. These studies suggest that:

- *Each industry – including higher education - has a generic set of CSFs;*
- *Other variables linked to each CSF may vary from one organisation to another;*
- *Periodic examination and reconstitution of the mix and rank of these factors is required to maintain their relevance and effectiveness in a rapidly changing environment.*

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[4] *Criticality: in the context of the notion of 'Critical Success Factors (CSFs)' as defined by Boynton and Zmud (1984:17) is a measure of the extent to which a 'factor' is deemed to be very important to the achievement of higher performance results. Kanji and Tambi (1999:137) defined CSFs as those few things (factors) that must go well to ensure individual and organisational performance success.*

These studies seem to conclude that some CSFs are predictable, but what is very difficult to predict is the mix of factors and their ranking in terms of relative importance and effectiveness in delivering desired results. This difficulty suggests there is a need to identify and rank CSFs for effective quality planning purposes. Sub-sections [A], [B], and [C] below reviews the literature on key external, internal, and competitive factors impacting on quality management practices in UK HEIs.

A. External Factors and Stakeholders' Needs and Expectations

The external factors driving demand for higher quality originate from politico-legal, economic, socio-cultural, and technological influences, which shape and are shaped by the needs and expectations of external stakeholders. Table 1.5, below, provides a list of external stakeholders under each influence, cites their main needs and expectations, and serves as a framework for reviewing the literature on CSFs.

Table 1.5
External Stakeholders Needs and Expectations
Sources: Based on information derived from the Key References cited in the Table

Influences	External Stakeholders	Needs and Expectations	Key References
Political - Legal	Government	Control of Public Expenditure	UK Budget (2003)
	HE Funding Councils	Selective Funding Allocation	HEFCE (2003b)
	Quality Assurance Agency	Quality Assessment	QAA (2000; 2002a)
	Department for Education/Skills	Knowledge and Skills Transfer	DfES (2003)
Economic	Government	Meeting Manpower Requirements	Harvey (2001)
	Funding Bodies	Knowledge Transfer	Clark (1998)
	Professional Bodies	Professionalism	UUK (2002a; 2002b)
	Employers	Transfer of Knowledge and Skills	Connor (1999)
	Students	Acquisition of Knowledge & Skills	Williams (1999)
	Taxpayers	Return on Public Investment	Dearing (1997)
Social - Cultural	Students	Fees, Sponsorships, Training	Williams & Abson (2001)
	Taxpayers	Improvement in Services	Brennan & Shah (2000)
	Government	Widening Participation	Watson & Bowden (2002)
	Society	Social Responsibility	Ball (1990a; 1990b)
Technological	Employers	Technology Transfer	Cuthbert (1999)
	Government	Growth in Industry Output	Connor & Pearson (1986)
	Society	Impact of Technology	Biggs (2003)

An extensive literature search revealed three categories of studies in higher education, which identified the government, students, and employers as key external stakeholders. First, studies on the impact of political, legal, and economic influences on UK HEIs include Jackson (1982), Psacharoupoulos (1987), Levin (1991), Salter and Tapper (1994), Kogan (1996), Bargh et al. (1996), McNay (1997), Brennan (1997), Henkel and Little (1999), Williams (1999), Barnes (1999), and Watson (2000). These studies identified the government as a key stakeholder, because, it had the political power to abolish the system of higher education, and is the main financier of publicly funded HEIs. Second, studies on the impact of social and cultural

influences include Ball (1990a; 1990b), Collins (1994), Trow (1994), Dill and Sporn (1995), Scott (1995), Kogan (1996), Warner and Palfreyman (1996; 2001), and Brennan and Shah (2000). These studies identified students as a key stakeholder group in terms of being consumers of higher education services and are customers in terms of their ability to pay directly or indirectly for the services provided. Third, studies on the impact of technological influences include Connor and Pearson (1986), Taylor (1997), Cuthbert (1999), Maier and Warren (2000), Oliver and Herrington (2001), and Biggs (2003). These studies identified existing and potential employers as key stakeholders in terms of the level of investment made and benefits they derive directly from advances in information and communication technologies (ICTs), and on their ability to employ graduates as part of the process of knowledge and technology transfer. Figure 1.3, below, is a hypothetical model comprising of the 'three' key external stakeholders based on the conclusions drawn from the above areas of study.

Figure 1.3
A Hypothetical Model of External Stakeholders in UK Higher Education
Source: Based on Studies on the Impact of Politico-legal and Economic Influence on Higher Education

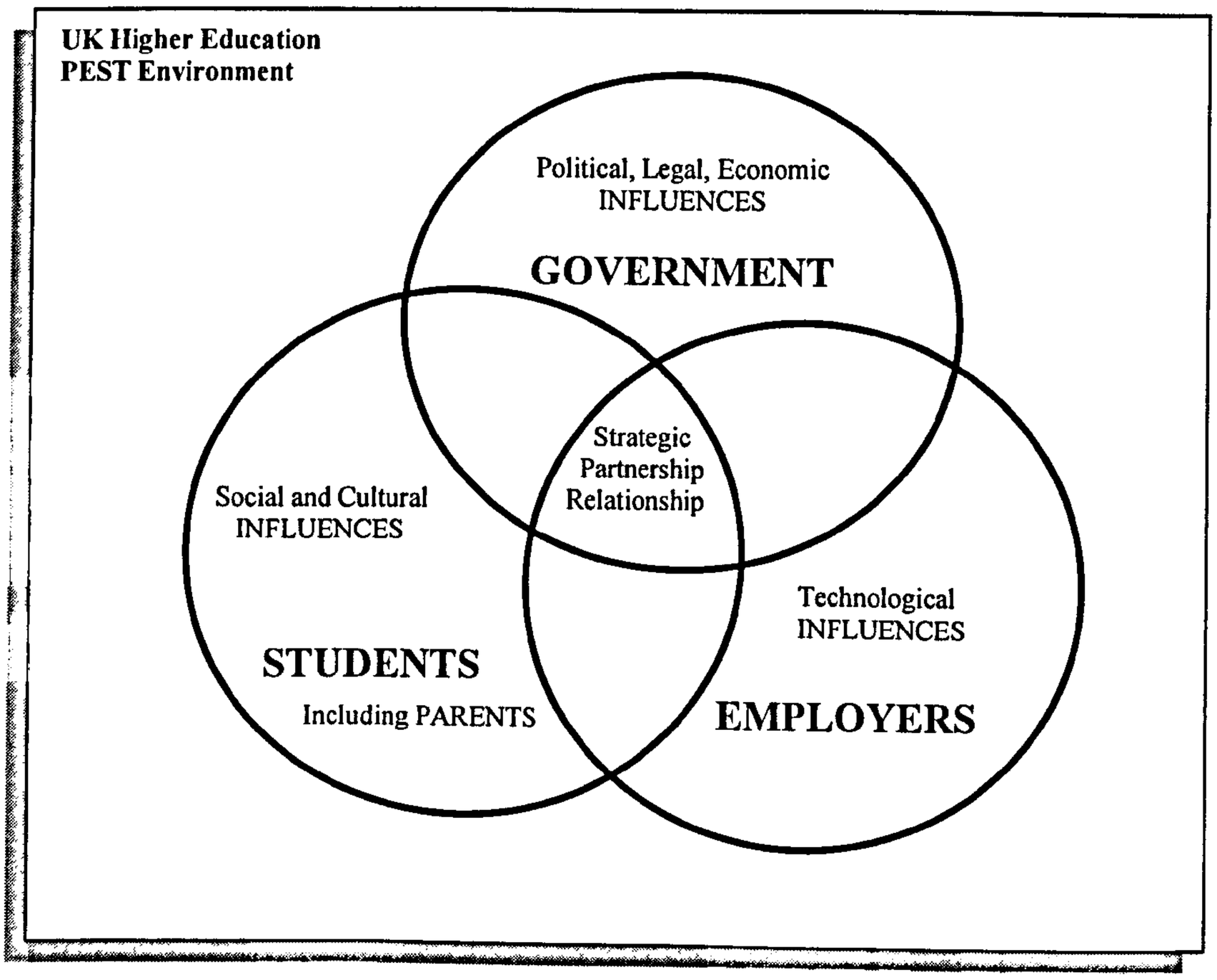


Figure 1.3 appears to suggest that, there are potential areas of similarities and differences between the three external stakeholders i.e. the Government, Students and Employers, which can be developed into a mutually beneficial strategic relationship.

The model by identifying key strategic partners reflects UK Government strategic intentions for the academic years from 2002/03 to 2005/06 as stated below:

"This White Paper declares our intention to take the tough decisions on higher education, to deal with student finance for the long term, to open up access to our universities, and to allow them to compete with the best. We seek a partnership between students, government, business and the universities to renew and expand our higher education system for the next generation. I hope the proposals, which I set out here will help strengthen that partnership. That is the foundation for our future national success." (Clarke, 2003:3)

This doctoral research study explores the extent to which individual UK HEIs effectively manage these 'strategic relationships', in order to sustain continuous quality improvement. Detail review of the specific factors emanating from the different sources of external influence is given below.

Factors Emanating from Politico-legal Influences

Political and legal influences are a result of government intervention in the activities of HEIs, which according to Davies and Kirkpatrick (1995:84-107) enjoyed considerable autonomy and academic freedom up to the late 1970s. According to Pollitt (1990:435-452), this intervention was motivated by successive UK government's perception that universities had become playgrounds for self-indulgent and inward-looking cliques rather than engine rooms for a post-industrial economy. Since the late 1970s, successive parliaments have acted through legislation in order to influence quality management practices in HEIs, examples of these actions are:

- *The shift in government policy since the late 1970s, from a commitment to preserving institutional autonomy and freedom to modernisation through accountability (Kerr, 1987:127-132), raised serious questions about the strategic role of quality in the modernization agenda (Davies and Kirkpatrick, 1995:85).*
- *The Further and Higher Education Act 1992 abolished the division between polytechnics and universities encouraging both pre-1992 and post-1992 HEIs to achieve higher quality in order to make them more competitive in attracting more students (Shakor, 1994; Kanji and Tambi, 1999:130; UCAS, 2000).*
- *The QAA was established in 1997 to safeguard and promote higher quality through progressive assessment of the quality of teaching and the standards of awards with the objective of obtaining increased value from public investment, continuous quality improvement, and reliable and relevant public information (QAA, 2003a; 2003b). The QAA's Strategic Plan: 2003-2005, describes the Agency's intentions for the period from 2003 to the end of 2005, and its model for assuring quality in publicly funded HEIs (QAA, 2003a:4).*
- *The establishment of the Higher Education Funding Councils (HEFCs) of England, Scotland, Wales and Northern Ireland, with the legal responsibility to*

selectively allocate funding for research through an assessment of the quality of research i.e. Research Assessment Exercises (RAE) (HEFCE, 1993; Kogan, 1996; Bauer and Henkel, 1999:236-262).

- *The UK Government's Department for Education and Skills (DfES) has over a long period concerned itself with creating opportunity, releasing potential and achieving excellence in publicly funded HEIs (Doherty, 1994; Kanji and Tambi, 1999:130; DfES, 2003:1-9).*

The key politico-legal factors emanating from the above *direct* and *indirect* government actions include:

- *The impact on higher education policy as a result of a change in political administration between two ideologically different parties;*
- *The level of government commitment to preserving institutional autonomy and freedom vis-à-vis the level of commitment to cost-effectiveness and accountability;*
- *The extent to which quality is used as a policy instrument to achieve and sustain the right balance between autonomy and accountability;*
- *The extent to which legislation is used to change the structure of and control the level of competition within the higher education industry;*
- *The frequency of change in external methodologies for teaching and research quality assessment;*
- *The impact of legislation on external disclosures, and the overall process of external reporting;*
- *The impact of changing government policy on the degree of selectivity in higher education funding formulae.*

A change in any of the above politico-legal factors may be seen as a *threat* or an *opportunity* by individual HEIs. For instance, the HEFCE as recently as May 2003 proposed a cut-off point for research grants, a policy, which is aimed at even greater selectivity in allocating funding for research. This according to THES (2003c:1-2) will exclude a third of English HEIs from the Research Assessment Exercise (RAE). English HEIs threatened by this policy proposal include: Leeds Metropolitan University, London Metropolitan University, University of Derby, and University of Wolverhampton (Goddard, 2003:1-2). On the contrary, this policy proposal according to Goddard (2003) will be seen by Oxford and Cambridge as an *opportunity* for them to get more money for research, since the reduction in research funding from under-performing 'modern' universities will most certainly mean more

money to fund research excellence in 'old' universities – in line with the objectives of the Funding Allocations for HEIs in England (THES, 2003d:6-7; 16). It raises questions about the ability of individual institutions to response effectively to changes in politico-legal factors by adopting quality management principles.

Factors Emanating from Economic Influences

Economic *influences* arising from the macro-environment in which UK HEIs operate are increasingly becoming market-driven and characterised by the *forces* of demand and supply. These forces comprise of *factors* which are dynamic and interactive which, in part are affected by the government in pursuit of its own political, social and economic policies and strategies (Worthington and Britton, 1997:70-107; 2003). The government continues to be a vital component in the macro-economy exercising great influence on the determinants of 'demand' and 'supply' and hence over the 'price' of output by public sector organisations including HEIs (DfES, 2003; QAA, 2003b).

Forces of Demand for Higher Education Services

Increasing demand for higher education services drives the demand for higher quality in teaching and research. Extensive studies on the level of demand for higher education services, include, Carnoy (1994), Williams (1995; 1996; 1997; 1999), Taylor (1997), and Connor (1999). These studies identified the key *determinants* of demand for teaching and research services as follows:

- *Tuition Fees represent the 'price' for higher education services, which is continuously rising in line with inflation and the cost of provision (Williams, 1999:143). The basic theory of demand suggests that - all things being equal, i.e. 'ceteris paribus' (as in Latin) - a rise in 'tuition fees' should lead to decline in 'demand' for higher education services'.*

- *Employers demand for more graduates as output from the higher education system is in line with expected increases in economic activity (Connor, 1999:90-104). The UK Government's Widening Participation Agenda is in response to growing demand for graduates in the economy in order to meet rising skill needs and sustain UK's international competitiveness. Globalisation has increased international demand for higher education services leading to increasing number of students from overseas, this calls for higher service quality (UUK, 2002a/b).*

- *Rising expectation of the potential benefits of higher education to all stakeholders – particularly, students, parents of students, government, employers and society - as the higher education sector expands and becomes increasingly competitive. (DfES. 2003). The greater the perceived benefit the greater the demand for higher education services with increased demand for higher service quality (Harvey, 2001:12; Morley, 1997; 2001:29-30).*

The above review suggests that, improvement in student finance, enhancement of the knowledge and skills of graduates, and the perception of future increases in the benefits derived from higher education, would lead to increase in demand for students by institutions and for graduates by employers. This would ultimately lead to increase in demand for higher quality teaching and research services.

Forces of Supply of Higher Education Services

The studies on the supply-side of the economic influences driving demand for higher quality in higher education include Clark (1983; 1993; 1998), Connor (1999), Glasner (2000), Harvey (2001), and Morley (1997; 2001). The key determinants of supply identified by these studies include:

- ***Rising Cost of Teaching and Research activities**: for instance with respect to undergraduate education current levels of Tuition Fees are far below what is required to cover the full-cost of provision. Even though the situation at the post-graduate level is much healthier, the Government has edged institutions to diversify their sources of funding. The role of the private sector in funding higher education is still not well defined (Clark, 1998, THES, 1998b; 2002a/b).*
- ***Rising Cost of non-academic activities**, mainly due do bureaucracy, continues to raise the expectation of taxpayers and the government for public accountability relating to outcomes of public investment (Dearing, 1997; HEFCE, 1994a; 1994b). This has led the government to highlight continuous quality improvement in both academic and non-academic activities as signifier of excellence, productivity and output (HEFCE, 1994c; QAA, 2002a; 2002b).*
- ***The emergence of a mass system** is represented by increase in the number of suppliers of higher education services and products within the industry (Williams and Abson, 2001:12).*

From the above review of existing literature on supply-side economic influences, there appears to be two key determinants of supply in UK higher education market, namely: the 'cost' of academic and non-academic activities and 'funding' levels. The way in which the forces of demand and supply interact to determine the 'price' of higher education services is examined in the sub-section below.

Determining the Price of Higher Education Services

The UK Government has for long used the power it derives from being the main funder of in higher education to influence the 'equilibrium price' or 'level of tuition fees' and the 'level of funding' demanded by the higher education industry (Williams and Abson, 2001; DfES, 2003). It has led to an increasingly bitter debate on whether or not 'excess supply' is better than 'under supply' of students at both the

undergraduate and post-graduate levels, which underpins the ongoing debate on top-up fees. Williams and Abson (2001:15-17) saw this debate as simply an argument between three categories of academics and politicians. *First*, those who hold that 'more means worse'; *second*, are those who argue that 'more means different' and lastly, those who champion the view that 'more means fairer'. The present Labour Government Policy of Widening Participation suggests that those who argue that 'more means fairer' may be winning the argument for expanding the system of higher education (DfES, 2003). These divisions have only led to confusion over who decides the 'equilibrium price' or the level of tuition fees required to sustain high quality teaching and research in individual institutions – the institutions or the government?

According to the Government's Department of Education and Skills (DfES, 2003), there is a gradual shift in the funding of UK higher education from public funding towards individual students making a greater contribution inline with the recommendations of the Dearing Report (Dearing, 1997). It provides institutions with an opportunity to recover the full-cost of providing teaching and research services. It however puts into focus, the on-going debate about the merits and demerits of introducing top-up fees in old universities like Oxford and Cambridge (THES, 2003g:4). Those in favour argue that, students must start paying for the full cost of higher education services, while those against argue that it will damage access (Sanders, 2003:4). The implication is that students and their parents - who will bear the cost - will be empowered to demand higher quality.

Factors Emanating from Socio-cultural Influences

The demand and supply of higher education services and products are influenced by social and cultural factors emanating from the socio-cultural environment. These factors affect the type of services and products being offered, the price at which they are sold, and the markets they are sold in (Worthington and Britton, 1997:8). It may be argued that since students and staff working in higher education are a part of the society changes in socio-cultural factors may be considered an opportunity or a threat to institutions' quality improvement activities. Studies on social and cultural influences in higher education include, Ball (1991), Luke (1997), Macrae et al. (1997), Connor (1999), Scott (1995; 2001), and Morley (1997; 2001). These studies

identified the following factors emanating from changes in the social and cultural environment in the United Kingdom Higher Education (HE) Industry:

Ageism, Life-long Learning, and Learning Society:

Participation by young people and adults in higher education is still growing, as part of government effort to create a knowledge-based economy (Connor, 1999:95; THES, 2003a). The concept of 'learning society' is gaining grounds in Britain (Morley, 2001:31). For its champions, it represents opportunity and democratisation (Ball, 1991:380; HEFCE, 1997a:15); for others, such as Macrae et al. (1997:500), it is a rhetorical project, which de-gendered, de-classed and de-racialized students and teachers, with serious implications for setting standards.

Ethnicity:

Participation by ethnic minorities has been growing, enabling adoption of teaching styles, which further the cause of social openness through increased diversity (Connor, 1999:95; Scott, 2001:191). This has serious implications for selection criteria, quality of delivery and the standards of awards.

Equality, Equity, and Disability:

Quality rather than Equality has dominated the change from an elite system to a mass system of higher education, allowing questions to be posed about whether Equity provisions are measures of excellence e.g. improved arrangements for disabled students may raise the level of student satisfaction. (Luke, 1997:433; Morley, 2001:30). Disability remains a fluid and contested concept. Many of the dilemmas that relate to discriminatory practices regarding ethnicity, gender and social class are relevant to disabled learners (Blair, 1997:26; Hayton, 1999).

Social Responsibility:

Higher education institutions are increasingly accepting the responsibilities and opportunities represented by a much closer engagement with the local community and with society. This is seen by some as undermining the mission of higher education to produce and transmit knowledge, but is welcomed by environmentalist as a move towards sustainable development (Scott, 2001:191).

Efforts to address changes in the above factors form part of the present Labour Government's Widening Participation Agenda, which some see as an experiment in social re-engineering to deal with the problems of social exclusion (DfES, 2003). Although these 'socio-cultural' issues are controversial, advocates of TQM such as Kanji and Tambi (2002) suggest that they are very important. A major concern for this researcher - which feeds into the thesis aim - is how to incorporate changes in societal and cultural needs and expectations into a holistic and integrated model for sustaining higher quality, which is cost-effective and meets the social and cultural aspirations of both internal and external stakeholders.

Factors Emanating from Technological Influences

Studies and writings on the impact of changing technology on higher education services include Scardamalia et al. (1994), Mazur (1998), Brew (1999), Maier and Warren (2000), Woodley (2001), Oliver and Herrington (2001), Battacharya (2002), and Biggs (2003). These studies suggest that in a higher education environment, the term 'technology' may be seen traditionally as a *mechanical* capacity and contemporarily as an *electronic-based* capacity to organise teaching and research and about what methods or techniques to use in knowledge production and transmission. Changes in such 'capabilities' have led to changes in the quality of input resources and the quality of output from the delivery process. Educational Technology (ET) comprises of Information and Communication Technologies (ICTs) for managing learning, engaging learners in appropriate learning activities, assessing learning and implementing distance-learning projects (Biggs, 2003:214-215). The key influences emanating from recent developments in the technological environment include:

- ***Impact of Globalisation:***

  The globalisation of higher education coincided with the development of information and communication technologies (ICTs), and a mass higher education system, with serious implications for quality improvement (Biggs, 2003:213);

- ***ICT Infrastructure:***

  Awareness of ICT infrastructure as a strategic resource for gaining competitive advantage in higher education is increasing. As a result, external agencies, such as the QAA are increasingly assessing ICT Infrastructure in institutions, as part of its Institutional Audit Process (Hughes, 1993; QAA, 2002a; 2002b).

- ***Internet and Intranet Web Sites:***

  All the relevant information to do with a department, programmes, courses, regulation etc. are now accessible via the Internet (OECD, 1988; OECD, 1998; Morley, 2001). There is evidence of increasing use of new ICT to meet the demands for flexibility in programme design and delivery (Morley, 2001:30).

- ***E-Learning Agenda:***

  It is predicted that the next few years, will witness both vertical and horizontal mergers between smaller higher education institutions in response to the challenges brought about by the e-learning agenda, with serious implications for the quality of teaching and learning (Harvey, 2001:39-40; Biggs, 2003).

Some academics see the above developments in ICTs as offering *opportunities* for improving the quality of teaching and research, and also enabling institutions to sell

their educational wares (Biggs, 2003:213). Others argue that these factors also present potential *threats* because new ICTs increases surveillance and regulation, with a primary aim to render staff more compliant (Ball, 1997; CIPFA, 2001:4).

A Summary of the Main External Environmental Factors

This sub-section examined the main issues emanating from the PEST analysis carried out above. It identifies the key external factors and briefly describes the changes, which might provide an opportunity or pose a threat to efforts to improve quality.

Politico-legal Factors:
The UK Government through the Department of Education and Skills, Funding Councils and Quality Assurance Agencies, acts to control public expenditure on higher education through selective funding allocations and quality assessment regimes, which impact on knowledge production and transfer of skills to industry.

Economic Factors:
The government and taxpayers, expect a competitive return on investment from publicly funded HEIs, in order to sustain its commitment to modernization. This demands that HEIs become cost-effective in their quality management practices.

Socio-cultural Factors:
The UK Government, taxpayers, and society as a whole are demanding increased participation in higher education. They are also demanding that HEIs become socially responsible for their actions in the communities they operate in.

Technological Factors:
Increasing number of HEIs are recognising the opportunities offered by ICTs to improve the quality of teaching and learning and research. This is in part due to the fact that the QAA assesses the extent to which institution's ICT infrastructure meets the requirements for internal and external reporting (QAA, 2002a; 2002b).

The next sub-section [B] looks at the *internal* factors operating in UK HEIs.

B. Competitive Factors Impacting on Quality Management

This sub-section applies the relevant parts of the model developed by Michael Porter - in his book titled *Competitive Strategy* (Porter, 1998) - to the UK HE Industry, to provide a review of the structure of the industry and the ability of HEIs to act strategically to sustain quality improvement. The work of Porter (1998) suggests that the ability of HEIs to act strategically depend upon the relative strengths of 'five' forces. These forces are (1) c*urrent competition*, (2) p*otential competition,* (3) *substitutes,* (4) *buyers*, and (5) *suppliers* to the higher education industry and individual higher education institutions.

Structure of UK Higher Education Market

The extensive literature on economic models of 'market structures' including Worthington and Britton (1997:233-262), suggest that, the extent to which HEIs compete amongst themselves determines the structure of the HE market. The literature also suggests that the strength of current competition can be thought of as lying along a continuum. At one extreme is *perfect competition* i.e. markets in which there is competition and at the other extreme is *monopoly* i.e. markets in which there is no competition at all. Lying between the two extremes are *monopolistic competitive* and *oligopolistic* markets in that order (Worthington and Britton, 1997:317). Successive UK Governments have acted directly and indirectly to shape the structure of the UK higher education (HE) Market. These actions have influenced the level of competition between institutions, as described by the following market characteristics:

- *There are many providers of HE products and services i.e. HEIs, as a result of the Further Education and Higher Education (FEHE) Act of 1992, which abolished the division between 'universities' and the 'former polytechnics';*
- *There are many consumers of HE products and services i.e. students;*
- *The fact that the DfES (2003:15) believes that students have insufficient information on how good the teaching is when applying for courses, suggests that HEIs, and students do not have 'perfect knowledge' of the level of tuition fees and costs of other products and services offered by other institutions. On this evidence alone the HE market cannot be described as being 'perfect';*
- *There are barriers to entry and exit erected by the government;*
- *The quality of teaching and research in all UK HEIs cannot be described as identical or homogeneous, judging by the wide variations in Teaching Quality Assessment (TQA) and Research Assessment Exercise (RAE) Scores.*

Apart from the *barriers* to entry and exit erected by the government and/or higher education institutions (HEIs) and the lack of *homogeneity* in the products and services on offer the market structure of the UK HE industry can be described as highly competitive – definitely not perfectly competitive. The UK HE industry comprises of different types of HE providers. As at March 2003, the UK HE sector comprised of: 77 universities i.e. 56 percent institutions; 14 general colleges i.e. 11 percent; and 41 specialist institutions i.e. 33 percent as shown in Figure 1.4 below. There is already increasing pressure on the Government from 'general colleges' and 'specialist institutions' to be given the right to become 'universities' (THES, 2003f:6).

Figure 1.4

This threat of new entry - if it does happen - will increase competition between universities for students and public funds, which will impact on resources for sustaining quality improvement in individual institutions in the UK. Application of Porter's (1998) principles to the HE industry suggest that, by acting strategically HEIs can change the 'market structure' of the industry to their advantage. For instance, in a highly competitive HE market, HEIs might be unhappy over various factors like 'pricing' e.g. the level of tuition fees and may through their strategic actions try to change the situation. If they are successful there will be a change in the level of current competition and therefore the HE market structure. Scott (1995; 2001:187-204) grouped institutions in the university sector into seven distinct types, on the basis of their *historical* development - rather than their differing approaches to quality management. The seven categories of institutions comprise of:

(1) ***'oxbridge' institutions**: Comprising of 2 institutions: Oxford (established, 1167) and Cambridge (established = est. 1209) (Tapper and Palfreyman, 2000);*

(2) ***'london and durham' institutions:** Comprising of 7 HEIs: The six colleges within the University of London (est. 1830s) and Durham (est. 1832) (Harvey, 2001:37);*

(3) ***'civic' institutions:** Originated from local civic initiatives, comprising of 14 HEIs. These are the old Joint Matriculation Board universities, including Edinburgh, Glasgow, Cardiff and Queen's universities. Examples in England: Manchester (est. 1850) and Birmingham (est. 1900) (Guardian, 2003b:12, 32);*

(4) ***'redbrick' institutions:** founded in the first half of the twentieth century, generally in the South. Example: University of Southampton (established, 1952) (Scott, 2001:195; Guardian, 2003b:36);*

(5) ***'plate-glass' institutions or 'new' institutions of the 1960s**: Founded by local initiative and built on greenfield sites during the 1960s. Examples: University of Essex (est. 1965) and University of Warwick (Robbins, 1963; Beloff, 1969);*

(6) ***'technological' institutions**: the former colleges of advanced technology became universities in the 1960s. Example: Salford (est. 1967) (Scott, 2001;187-204);*

(7) ***'new' institutions of 1992**: The Further and Higher Education Act of 1992, abolished the binary division and created a unitary system of higher education. It gave some educational institutions power to award degrees and the right to use the title 'university'. Examples of modern or post-1992 universities: University of Derby, Sheffield Hallam University (Watson and Bowden, 2002:5; HESA, 2002).*

Some writers including Watson and Bowden (2002) see Scott's (1995) method of categorisation as rather complex and prefer the much simpler grouping of institutions into two categories: pre-1992 and post-1992, based on the Further and Higher Education Act of 1992, which abolished the binary division between universities and polytechnics. Pre-1992 universities are commonly referred to as 'old' universities and include categories (1) to (6) above; category (7) is correctly described as post-1992 universities or 'modern' universities. Statistically, there are now more post-1992 institutions than pre-1992 institutions (HESA, 2002). Today, there are sub-groups within both 'old' and 'modern' universities promoting their own mission-driven interest in either 'research' or 'teaching' respectively. A typical example is the 'Russell Group' of 'research-centred' 'old' universities (Scott, 1995; 2001). There is increasing collaboration between 'modern' universities to improve teaching and learning in their institutions (Watson, 2000).

Quality management practices, within each higher education institution are bound to be complex and diverse, because each institution has a particular kind of constitution, various modes and levels of funding from the public purse, industry and commerce, and private donation. According to Williams and Abson (2001:12), there are also differences in the way they construct and re-construct academic disciplines, research, course design and content, control of student entry through qualification requirements, assessment regimes, staff appointment, promotion and terms of contract, and teaching.

Barriers to Entry and Exit in the Higher Education Market

The Government as the main funder of public sector HEIs has the political power to increase or reduce the number of institutions within the sector in order to influence the level of competition within the HE industry. As at present, there is a potential threat

of new entry, into the university sector by General Colleges and Specialist Institutions (THES, 2003d:6-7), with a potential for intense competition between universities for government funding (THES, 2003f:6).

Threat of Substitute Higher Education Products and Services

Many post-1992 universities with enormous experience in managing polytechnics are increasingly differentiating their HE products and services in order to reduce the threat from substitute offers from pre-1992 universities, and from overseas HEIs (Watson and Brown, 2002). According to Williams and Abson (2001:13), these so called 'modern' institutions are offering more part-time, sandwich and vocationally oriented courses; whereas, pre-1992 universities, on the other hand, are still associated with full time courses, higher professional education, theoretical knowledge, and particularly research. There is however, a clear indication that, many of these so-called 'old' universities are also offering a vast number of differentiated programmes similar to those offered by pre-1992 universities (University of London, 2003; University of Manchester, 2003).

The present UK Government expects individual HEIs to apply their scarce resources in order to gain competitive advantage, by focusing on what they do best (DfES, 2003:20). This appears to contradict the government's official position of encouraging greater explicit differentiation, freedom and collaboration (DfES, 2003:22) because of lack of funding. The pace of both social and technological change - in an era of lifelong learning - suggest that higher education can no longer be confined to the early years of life. Today's generation of students will therefore need to return to learning - full-time or part-time - on more than one occasion across their lifetime in order to refresh their knowledge, upgrade their skills and sustain their employability. According to the UK Government, such independent learners investing in the continuous improvement of their skills will underpin innovation and enterprise in the economy and society (DfES, 2003:15). It also argued that, although at present there are enough choices for flexible study - including part-time courses, sandwich courses, distance learning, and e-learning - there must be an increasingly rich variety of subjects to study, which will keep pace with changes in society and the economy (DfES, 2003:15). There is however, a broad consensus that, it is unreasonable to expect institutions to sustain all of these vision elements or activities simultaneously at local, regional, national, and global levels of excellence.

Power of Students as Customers

Provision in UK HEIs is now driven by the need to meet and exceed student expectations. This need to satisfy students has risen since 1981 following rapid increase in the number of UK-domiciled and overseas students from around 800,000 in the academic year 1980/81 to nearly 1,250,000 in 2001/02 (THES, 2002a:26-27). Women overtook men as a proportion of the undergraduate population in 1996-97 and men have been closing the gap since (see Figure 1.5, below).

Figure 1.5

This suggests that HEIs now have to cope with the expansion in the number of students by differentiating their products and services to meet the requirements of men and women of all ages, full-time and part-time studies, to help students combine learning with work and family life. According to Kanji and Tambi (1999) many UK HEIs have accepted the challenge this development poses and have increased their efforts to maintain higher quality teaching and research. HEIs are making vigorous attempts to satisfy the needs and even exceed the expectations of students as the main customers including the requirements of other stakeholders. User-friendly provision has been introduced into higher education, such as credit accumulation and transfer, modularisation and multiple entrance points. Some writers and researchers, including Kanji and Tambi (1999:131) see the increased customer focus in UK HEIs as a move

closer to implementation of advanced quality management principles. Others including Morley (2001:31-32) however, see these developments as evidence of pedagogical fragmentation, which encourages regulation and surveillance through checklists and taxonomies of competencies, subject benchmarking, and performance measures and indicators. The DfES (2003:15) provides two evidences, which confirms that, the expansion in student population has impacted on institutional effort to sustain the quality of teaching and learning. First, students at present have insufficient information on how good the teaching is when applying for courses – an evidence of lack of perfect knowledge characteristic of an imperfect HE market; and second, staff-student ratios have declined from just over 1:10 in 1983 to 1:18 in 2000. These tend to mean that students are not well informed on choices, write fewer assignments and have less face-to-face contact with staff; as a consequence are unable to effectively critique the quality of teaching and learning from what is in effect a weak bargaining position.

Power of Suppliers to the Higher Education Industry

The government is the main provider or 'supplier' of financial and non-financial resources in the higher education sector (Glasner, 2000). It intends to retain this central role, because it believes, it is the only body that can balance competing interests between the different stakeholders (William and Abson, 2001:17). It also has the responsibility to intervene when institutions fail to provide adequate opportunities or when access, quality or standards are at risk (DfES, 2003:21). The reports commissioned from JM Consulting by HEFCE found that there was an infrastructure backlog of about £8 billion, consisting of a research infrastructure backlog of £3.2 billion, and a teaching infrastructure backlog of £4.6 billion, plus a need to double spending on maintenance (DfES, 2003:14). The government hopes its recent funding allocation will stabilise the funding of institutions, and allow them to make sustained progress in improving teaching and research quality. In the long term the government sees a much greater role for institutions establishing endowment funds and using the income from them in much the same way as is done in the USA (DfES, 2003:19-20; Wilson and Green, 2001).

Statistics from the Higher Education Statistics Agency (HESA, 2001) reveal a recruitment situation that has steadily deteriorated 1998. Over 60% of HEIs reported

difficulties in recruiting lecturers in certain subjects, notably computing/IT, business-related subjects, science, engineering, medicine-related subjects and education (DfES, 2003:15). This has raised concerns about institutions' ability to recruit, retain and reward the best researchers who provide the essential teaching and research leadership. There are also concerns about how to attract and retain the best researchers internationally, and how to maintain a steady flow of the brightest and best young people into research (DfES, 2003:14).

Summary of Competitive Factors impacting on Quality

From the above critical review of competitive factors in the UK HE industry or market - using Michael Porter's Five Forces framework (Porter, 1998); a summary of the main competitive factors in terms of whether or not they constitute an *opportunity* or *threat* is provided below as follows:

- ***Intensity of Competition:***

  Even though the Government has the power and justification to determine the level of competition, HEIs with similar missions can act strategically to influence the number of HEIs operating within the HE Industry. For instance they can lobby government to provide sufficient funding in support of an agreed level of tuition fees required to sustain quality improvement.

- ***Threats from New Entrants:***

  The potential entry into the university sector by General Colleges and Specialist Institutions will intensify competition for the already scarce funding resources available for clearing the backlog in teaching and research infrastructure in the university sector.

- ***Threats from Substitute HE Products and Services:***

  The over dependence on government funding by financially weak higher education institutions - in particular those without any substantial endowment funds – will make it difficult for these institutions to embark on greater differentiation because of the high risk of failure.

- ***Bargaining Power of Students as Customers:***

  Some academics and practitioners argue that there is a need for a regulator because students as consumers or customers do not yet have perfect information on the quality of teaching and research in institutions they wish to attend. For this reason provision in higher education may not yet be described as market driven. It is also well documented that higher education institutions the world-over are

under intense pressure from funding bodies to satisfy and delight students whether or not students or their parents pay fees directly.

- ***Bargaining Power of Suppliers of HE Products and Services:***

  Higher education institutions are being encouraged by the Government, potential Employers and other stakeholders to deal with their staff recruitment difficulties in order to sustain continuous quality improvement.

The sub-section [C] below provides a critical commentary on the critical success factors (CSFs) prevailing in the 'internal environment' of UK higher education institutions.

C. Internal Factors Impacting on Quality Management Practices

The aim of carrying out a review of the internal environment of higher education institutions (HEIs) is to identify the key areas of *strengths* and *weaknesses* in their quality management practices. Studies on the academic quality management and leadership by Brennan and Shah (2000), Knight and Trowler (2001), Harvey (1995; 2001), Biggs (2003), and Bushaway (2003) identified key external influences and factors from the macro and micro environment which impact on internal factors relating to teaching and research quality management practices. It is worth noting that, these studies on external influences and factors were not carried out in isolation from internal influences but were a part of strategic quality planning activities in higher education. There is therefore a logical link between internal, external, and competitive environmental factors as suggested by strategic analysis - a key stage in strategic quality planning process (Thompson, 2003; Oakland, 2002; 2003).

These studies identified very important performance areas for improvement. These performance areas are reviewed under 'six' sub-headings comprising of 'six' main internal factors:

(1) *Leadership*;

(2) *Policy and Strategy*;

(3) *People Management;*

(4) *Resources;*

(5) *Processes; and*

(6) *Systems Theories.*

The first five sub-headings or 'criteria' are identical to the terminology used by the EFQM Excellence Model. They are generally referred to as 'enabler' criteria because they constitute group of critical success factors, which enable or strengthen the ability of organisations to manage their resources efficiently in order to achieve predetermined performance 'results'. The literature on performance excellence models suggest that the conceptual and empirical linkage between 'enabler' criteria and performance 'results' criteria is based on the notion of 'cause-and-effect' or 'means-and -ends' (British Quality Foundation, 2000), EFQM, 2003a). These studies suggest that UK higher education institutions may have to undergo structural and cultural changes in order to inspire and deliver sustained improvements in academic quality and performance.

The last sub-heading i.e. 'systems theories' was selected because all the alternative approaches to academic quality management - examined later under sub-section [D] - are based on 'systems thinking', which examines the whole i.e. inputs, processes, and outputs rather than a part of the whole. We shall now proceed to discuss below the critical success factors (CSFs) emanating from the internal environment in which individual UK higher education institutions operate.

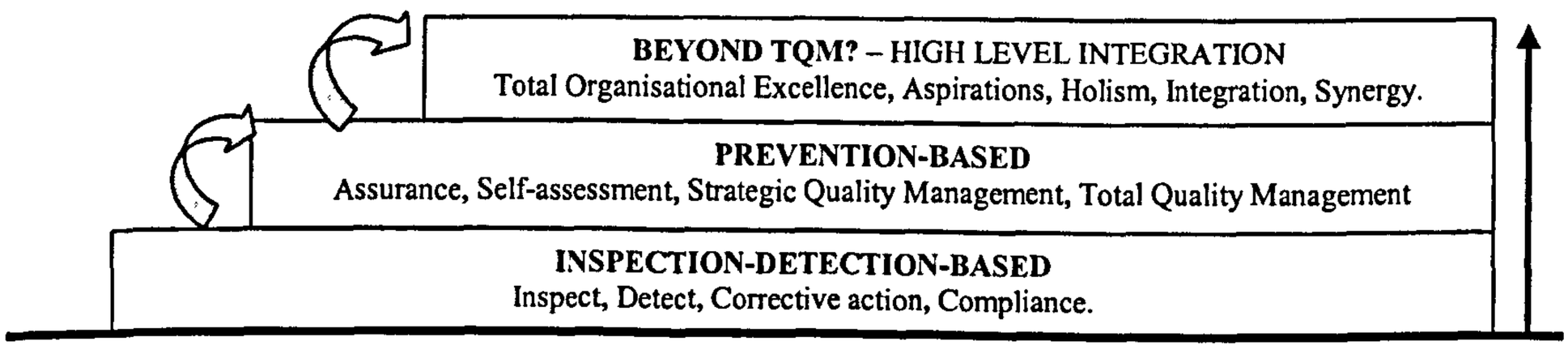
Leadership for Academic Quality Management:
The functional relationship between 'efficiency' and 'effectiveness' - introduced

Management and leadership studies by Bass (1960), French and Raven (1968), McGregor (1987), Parker (1994), Crainer (1995), Taffinder (1995), Mullins (1999; 2002; 2003), Novak (2002), and Kanji (2003), confirm there are many different definitions and bases for exercising leadership. These studies suggest that within higher education institutions (HEIs) the influence exerted by a leader depend upon the power-relationship between the leader and staff. Some writers argue that formal and informal management and leadership structures determine the nature and effectiveness of the leadership-staff relationship. This relationship according to Bass (1960) is one in which intended behaviour and results bring about functional behaviour and achievement of team objectives. The works of French and Raven (1968) and McGregor (1987) suggest that effective leadership-staff relationship requires a dynamic form of leadership behaviour based on the exercise of power to influence the behaviour and actions of subordinate staff.

The works of Novak (2002) and Kanji (2003) suggest that 'academic leadership' may be defined as a personal and professional relationship between those in leadership position and their subordinate staff, needed in order to appreciate and call forth their potential.

From TQM perspective, 'management' is about 'doing things right' and 'leadership' is about 'doing the right things' (Bennis and Nannus, 1985; Juran, 1989). According to the writings of Mullin (1999:233) 'doing things right' relates to 'efficiency' whereas 'doing the right things' relates to 'effectiveness' - managerial leadership is therefore about 'doing the right things right'. This suggests that a functional relationship exist between 'efficiency' and 'effectiveness'. The literature also suggest that a major difference between the theories of *leadership* and the theories of *management* is that the former implicitly and explicitly involves bringing about desired change or challenging undesired change whereas, the later is merely about planning and controlling change (Clark, 1998:143; Knight and Trowler, 2001:3). According to Gretton (1995) there is a move away from leaders who obtain improvement results by close inspection and control of the actual task carried out by sub-ordinate staff towards leaders who obtain results by creating an enabling environment of coaching, support, motivation, and empowerment of sub-ordinates. This shift in leadership may be linked to the stages of evolution of approaches to quality from inspection and control to assurance and management – as depicted in Figure 1.6 below – which seems to recognise the importance of all staff as a strategic human resource.

Figure 1.6
The Stages of TQM Evolution and the Shift in Leadership Emphasis
Source: Based on the work of Dale (1999), Oakland (1999), Kanji (2003)



Drucker (1989) believed that leadership consists of certain personality traits. However, research studies by Byrd (1940), Miles (1959), Jennings (1961), Krech et al. (1962), Ghiselli (1963), Stogdill (1974), Adair (1983) and Kotter (1990), suggest that leadership skills can be learned, developed, and perfected in order to make

leaders more effective at influencing staff behaviour and achievement of team goals. Leadership studies carried out in the 1960s by the Bureau of Business Research at the Ohio State University, and later by Likert (1961), Fleishman (1974), Blake and McCanse (1985) suggest that, leadership resides in a 'task or production' function and a 'maintenance or people' function and not in personality traits. These two major functions of leadership are consistent with McGregor's (1987) Theory X and Theory Y respectively, and draw attention to the effect of leadership styles on staff performance in a changing work situation. The impact of changing work situation led to the development of contingency or situational models of leadership by Fieldler (1967), Vroom and Yetton (1973), House and Dessler (1974), and Hersey and Blanchard (1993) based on the assumption that there is no single leadership style appropriate to all situations. The works of Likert (1961), Blake and Mouton (1985) and Belbin (1993) suggest that there is a greater need to understand staff needs and expectations in a changing work situation. This need is coupled with societal pressure for power sharing which have led to increased adoption of team leadership style or a participative democratic style of leadership, and created resistance against purely authoritarian or solo leadership style. Increasing organisational competitiveness and the need for the most effective use of human resources have led writers and researchers including Burns (1987), Nicholls (1988), Hunt (1992), Bass and Avolio (1994), Yukl (1994; 2002), Kreitner and Kinicki (1995), Taffinder (1995) and Greenberg and Baron (1997), to study 'transformational leadership', which they argued is both desirable and necessary in competitive environments, and requires organisations to be capable of fast, radical change and those aspiring to be the best must be able to lead change rather than just follow it (Mullins, 2003).

Brennan and Shah (2000:1) argued that, traditional leadership culture in UK HEIs involves high levels of personal autonomy and does not embrace enthusiastically leadership styles with strong elements of conformity and regulation. As a result, decision-making processes in most HEIs are seen to be too slow to make the most of the opportunities that present themselves and insufficient capacity existed for taking advantage of such opportunities (Brennan and Shah, 2000:1; Harvey, 2001:42). Exploiting these opportunities according to Harvey (2001:42) requires changes in the way academic business is handled, effective integration of deans of schools into top management, and leadership through empowerment. It suggests that the priority of top

management should be to speed up the decision-making processes by finding structures that would make the most of the multidisciplinary and interdisciplinary opportunities available. In summary, even though there are many alternative forms of leadership, the works of Lindquist (1978), Mullins (1999; 2003), Knight and Trowler (2001) suggest that, a people-oriented leadership style is more likely to lead to staff satisfaction, improved performance and group cohesiveness in most organisations including higher education institutions.

Quality Improvement Policy and Strategy

Studies on Policy and Strategy by Tills (1969), Rea (1989), Richardson and Thompson (1994), Lynch (1997), and Johnson and Scholes (2002; 2003), suggest that *policy* can be formalised within a framework of implicit and explicit *strategy,* which describes an institutions' sense of mission, purpose, plans and actions for its implementation. These studies also show that there is a clear relationship between organisational mission, principles and values, objectives and targets, policies and strategies (Etzioni, 1964; Simon, 1964; Mullins, 2003). The Mission i.e. the 'reason for existence' or 'overall purpose' of both *old* i.e. pre-1992 and *modern* i.e post-1992 UK HEIs, is clearly expressed in terms of teaching, learning, scholarship and research, with some institutions either more focused on teaching or research (Scott, 2001). Some argue that these mission areas are not mutually exclusive and may sometimes conflict with each other (THES, 2003h:6-7). A mission statement is commonly expanded into a set of principles and values, which underpin the achievement of higher quality teaching, learning, scholarship and research (Oxford, 2003a; Cambridge, 2003a; Derby, 2000b; Derby, 2003a; Sheffield Hallam, 2003a). According to the literature, quality improvement activities, for instance in the areas of teaching and research must be directed towards *specific*, *measurable, achievable, realistic* and *timely* i.e. SMART objectives and targets (Oakland, 2003). This allows a set of objectives and targets to be derived from the policies and strategies in order to regulate the behaviour of all staff involved in the quality improvement process. The literature also shows that the extent to which an institution successfully decides its quality improvement policies and strategies enables it to survive in an environment of limitless demand and finite resources. The ability to make strategic decisions helps to determine the nature of inputs, processes and outputs, and how these interact with the external environment (Brennan and Shah, 2000; Scott, 2001; Biggs, 2003).

Some academics and practitioners have argued strongly against the whole issue of setting quality improvement objectives and targets for public sector organisations including HEIs. These arguments according to some writers, weakens the base for effective policy and strategy deployment (Davies and Kirkpatrick, 1995). Empirical research by Brennan and Shah (2000:1) confirms existence of two contrasting quality improvement policies and strategies. First, some institutions pursue policies based on the assumption that a causal relationship exists between 'quality improvement' and 'performance improvement' at the institutional level (Ho and Fung, 1994:24; Kanji and Tambi, 1999; Oakland, 2000; Zairi, 2000a; 2000b). Cynics however dispute any positive correlation between quality improvement and performance improvement, and argue that the pursuit of quality improvement seriously undermines academic autonomy and the mission of HEIs (Ho and Fung, 1994:24; Brennan and Shah, 2000:1). Despite the dispute about the nature of the association between 'quality' and 'performance', most academics and administrators agree that the accountability regime is here to stay, and that in an environment of resource constraints difficult choices have to be made on daily basis. This according to Harvey (2001) calls for constant monitoring of progress against agreed objectives and targets in order to meet both internal and external requirements for quality improvement

Management of Staff in a Quality Management Context

The works of Armstrong (1987), Torrington (1988), Clark (1993), Fowler (1987), and Guest (1987; 1989; 1991) show that, there has been much debate about the conceptual difference between 'human resource management' (HRM) and staff or 'personnel management'. There are two schools of thought, the first, believes that the terms are simply interchangeable, because personnel management has simply been re-titled to give it a more contemporary image (Guest, 1989); the second, school of thought, however, considers that, there is an essential difference, based on the argument, that:

- *HRM embraces a 'strategic approach to personnel or staff management; the integration of staff on the basis of commitment and not mere compliance with instructions; and an organic, decentralised, structure (Kessler, 1993:20);*

- *HRM is a part of management concerned with the effective utilization of human resources, and conducted by all managers at strategic, tactical and operational levels of an organization. Staff or Personnel Management is therefore, a departmental or unit function, which ought to be seen as an integral part of HRM (Storey, 1992; Warner and Crosthwaite,1995:3)*

This doctoral research thesis adopts the second school of thought, because it is contemporary and based on sound strategic human resource management principles. Contemporary thinking on 'people management' in higher education, by Guest (1987), Seddon (1989), Waldman (1994), Powell (1995), Warner and Crosthwaite (1995), and Godfrey et al. (1998), suggest that more emphasis should be placed on the 'soft' i.e. *people* aspects of quality improvement. The works of Garvin (1991), Kearney (1992), Pfeffer (1994), Wilkinson et al. (1998), and Beckford (2002), however, suggest that many organisations are placing more emphasis on *tools and techniques*[5] i.e. the 'hard' aspects during the formulation of quality improvement policy and strategy, than on the 'soft' aspect. The 'hard' aspect relates to 'tangible' performance measures commonly associated with the views of scientific management theorists. In contrast, the 'soft' aspect focuses on 'intangible' performance measures relating to individual staff *involvement* in and *commitment* to quality improvement activities, a view commonly associated with the believes of human relation theorists. In the context of UK higher education, Warner and Crosthwaite (1995:1), observed that, the human resource expenditure represents a substantial element of the budget of both pre-1992 and post-1992 universities. They suggested that top leadership at the chancellery and deanery levels should place emphasis on 'people' by strategically aligning human resource policies and strategies to quality improvement policies and strategies. Despite this emphasis on 'soft' elements in the literature, empirical research by Osseo-Asare and Longbottom (2002), concluded that not many UK HEIs take the 'people' aspects seriously - evident by low staff morale, high workloads and high staff-turnover. Advocates of integrated quality management practices including Professor Yoshio Kondo suggest that, the 'hard' and 'soft' aspects need to be integrated in order to derive maximum benefits from synergies (Marchington and Wilkinson, 1996; Zairi and Peters, 2001; Kondo, 2001:25). Some writers including Seddon (1989) and Dale (1999), however, cautioned against the rush to integrate the 'hard' and 'soft' aspects, by acknowledging the potential tensions that might occur between the 'hard' and 'soft' aspects, when an attempt is made to integrate the two aspects. They were of the view that the desired change in attitude and institutional culture may not be achieved if the 'hard' and 'soft' aspects of quality management were to be integrated.

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[5] ***'Tools and Techniques'*** *in quality management terminology refer to 'performance measurement devices' categorised as part of the 'hard' aspects of TQM (Dale, 1999). See Bibliographical Notes for comparison with* ***Models*** *and Quality* ***Awards*** *Criteria.*

The works of Dale and Plunkett (1990), Oakland (1989), Marchington (1992), and Coyle-Shapiro (1993), suggest that each of the quality gurus place a rather different emphasis on the 'soft' aspects of quality management. Crosby (1979), Juran (1988; 1989; 1992) and Taguchi (1986), assigned a minimal role for employees in continuous improvement. Deming (1882; 1986), Feigenbaum (1956; 1983; 1991), and Ishikawa (1985) offer a more positive role for employees arguing that if individuals enjoy what they do, their motivation will be intrinsic, rather than extrinsic with the former being a prerequisite for continuous improvement. The direct involvement of employees in quality issues and how it relates to their own jobs is regarded as very important (Marchington et al., 1993).

Job advertisements for academic and administrative positions in the *Times Higher Education Supplement* and *The Guardian* are becoming a series of short-term contracts and part-time work, and no longer a job for life (THES, 2003i; Guardian, 2003a). Dale (1999:209) argued that the principle of employment security is not undermined by a major collapse in the market, because the collapse necessitates reductions in the labour force. He argued that the main point is that job reductions will be avoided, wherever possible, and that employees should expect to maintain their employment with the institution. As a result, flexible employment is now a vital element of both corporate and UK competitiveness. HEIs are increasingly making use of group or team approaches to teaching and research with an emphasis on co-operation, participation and empowerment, in order to survive in the labour market. Studies on human resource practices by Pfeffer (1994), Marchington and Wilkinson (1996) and Godfrey and Wilkinson (1998), summed up the view that academic and non-academic staff should not be treated as a variable cost, but rather viewed as a critical resource in the long-term viability and success of a HEI.

Financial and Non-financial Resources and Institutional Sovereignty and Autonomy

This sub-section examines material resources, and how their deployment impacts on quality improvement activities in HEIs. These resources are broadly categorised into two in terms of whether or not they are financial or non-financial in nature. According to Barnes (1999:162-190), financial and non-financial resources combine in different ways to secure institutional autonomy. He argued that, for HEIs to enjoy any significant degree of autonomy, they must be in the possession of considerable

resources, which are not, and cannot be controlled by others, and suggests, that, for an institution to remain relatively free to deploy resources available to it, external influence should never be allowed to lead to any significant degree of control (Barnes, 1999:162). This appears to suggest that a degree of external influence – in the form of government funding allocations and quality assessment - on the way in which individual HEIs deploy their resources is tolerable. This suggestion is based on the belief that government intervention is desirable in circumstances in which institutions are seen to be failing.

Studies on Government Funding Policy by Williams (1991), Becher and Kogan (1992), Barnes (1999), and McNay (1999) clearly suggest that without an independent flow of financial resources a publicly funded HEI has no way of exercising sovereignty, and unless the inflow is substantial, its autonomy will be severely compromised. They also suggested that in the foreseeable future, the government would continue to use 'quality' as a policy instrument for selective allocation of funds for teaching and research. The new Labour Government intends to remain the major source of funding for UK HEIs, conditional on delivery of higher quality teaching and research (Williams, 1999; DfES, 2003). In the context of the intensity of competition within the HE industry (Porter, 1998), prediction of the direction of government funding policy, according to Harris (1998), Barnes (1999) and Clarke (2003) depends on the *bargaining power* of the higher education sector which in turn depends on the extent to which the HE industry helps the government to achieve its key goals in the areas of International Competitiveness, Regional Regeneration, Widening Participation, and Lifelong Learning.

In most HEIs, funding gaps, according to Williams (1999:152), translate into increased budget deficits, which require reduction in expenditure on all areas of operation, including quality management activities. In reality, a 'funding gap' is a 'quality gap' where available operational resources are insufficient to sustain continuous quality improvement (Barnes, 1999; Williams, 1999). The debate about moving to full cost fees and top-up fees is still on-going, and according to Barnes (1999:179), threatens to damage the quality of British higher education beyond repair and the capacity of the system to reverse its decline will have been very substantially diminished if not resolved. Some institutions in response to increasing government demand for greater diversity in their funding base, have generated more earned

income from what Clark (1983; 1998) identified as 'third stream sources', for example, income from contracts and consultancy with targeted sectors of the business community and public sector bodies (Harvey, 2001:45).

Underlining the requirements for non-financial resources is a funding challenge. Shortfalls in funding, have seriously affected the ability of institutions to make adequate provision for their human resource requirements, maintaining the infrastructure and to effectively manage their estates (Barnes, 1999:178). The present new Labour Government intends to reverse years of under-investment with an increase in investment to deal with the backlog in building and equipment for the next three years (DfES, 2003:19). Most UK HEIs have pursued and continue to pursue a policy of developing and reconfiguring their estate in order to enhance the quality of the students' learning experience (Derby, 2003a; Oxford; 2003a). For instance at Sheffield Hallam (2003a) and Cambridge (2003a), the modernisation of critical elements in the learning and research infrastructure has been central to the advancement of the institution's mission to promote lifelong learning and develop as a centre of excellence in teaching and research. Lack of investment in new infrastructure, and lack of cash to maintain existing structures, over a long period of time, suggests that, financially weak HEIs will struggle to expand their teaching, research, recreational and administrative support space to cater for the increasing number of students; with very serious implications for increased investment in quality improvement activities (UUK, 2003:9).

Process Improvement for Quality Management

Various studies on *process* improvement by Hammer (1990), Davenport and Short (1990), Hammer and Champy (1993), Born (1994), Zairi (1997), McCabe (1997), and Harrington (1987; 1998) suggest that continuous improvement in *processes* over a relatively long period of time, as suggested by the philosophy of TQM provides the basis for the more short-term radical change and improvement, suggested by the philosophy of Business Process Re-engineering (BPR) or Business Process Management (BPM). Research by Kanji and Tambi (1999:144) and later by Osseo-Asare and Longbottom (2002:26-36) confirmed that 'processes' as a critical success factor (CSF) is ranked by most UK HEIs as being more important than 'leadership'. Kanji and Tambi (1999) who are TQM advocates argued that it is strategically wrong

to rank *leadership* second to *processes,* because the most important factor in the successful implementation of TQM is the 'total' commitment of top-leadership of the institution. A possible reason for the strategic error of judgement, appears to be based on the fact that, most institutions have for long been preoccupied with meeting the external requirements of the QAA and HEFCE which place more emphasis on 'processes' rather than on 'leadership' (Osseo-Asare, 2000; Osseo-Asare and Longbottom, 2001). This is underlined by empirical evidence provided by Brennan and Shah (2000) that, the academic culture in UK HEIs casts serious doubts on the possibility of gaining 'total' commitment from the chancellery and deanery on the objective of quality assessment; an issue which is seen to be controversial because of the fear that the assessment *process* – if not carefully implemented - could undermine institutional autonomy and academic freedom.

Many of the performance evaluation models for higher education are based on 'systems thinking' which is discussed in detail below. For instance, Palfreyman (2001:9-28) evaluated the performance of Oxford and Cambridge using an *inputs-processes-outputs* performance model. He saw a 'process' as a 'black box', which explains 'what happens inside Oxford's stone-faced, oak-beamed listed buildings'. In that sense, leadership, policy and strategy, human resource management, and resources as explained above are all inputs into the 'black box'. Studies on *processes* in higher education carried out by Kogan (1999) and Palfreyman (2001), identified *academic* processes e.g. the peer review process, *administrative* processes e.g. the process of handling students' complaints, and *support-service* processes e.g. student-support processes, as the key processes which impact on the quality of the output of the system of higher education expressed in terms of employable graduates, research, and social responsibility.

Systems Theories of the Quality of Teaching and Learning

The literature on 'systems thinking' suggest that a 'systems' approach to quality management offers a long-term solution to sustaining quality in higher education; primarily because it focuses directly on the assessment of the quality of 'inputs', 'processes' and 'outputs' (Beckford, 2002:176-190). The works of Jackson (1991), Flood and Jackson (1991) and later Flood (1993; 1996) on 'systems thinking' reject the idea that, there is 'one best way' of solving any quality related problem. They instead proposed that, each methodology has potential benefits in the *context* of a

particular organisation. This doctoral research study therefore, prescribes to the notion that, 'contextual issues' are indeed very important for the successful implementation of any quality management 'model', 'self-assessment methodology', or 'quality award criteria'. The fact that 'context' is important suggests a critical review of the theories underpinning effective teaching and learning is necessary at this stage. Prosser and Trigwell (1998) identified *Constructivism and Phenomenography* as the two most influential theories on Teaching and Student Learning. These two theories according to Ginsberg and Opper (1988) and later Steffe and Gale (1995) have their origins in cognitive psychology and are similar because they both focus on the nature of students' learning activities or approaches, and place emphasis on the 'meaning' created by the 'learner' or student.

Reference to Remenyi et al. (1998:35), Saunders et al. (2003:83-86) and Tashakkori and Teddle (1998), suggests that by placing emphasis on 'meaning', *constructivism* and *phenomenography* – as applied to teaching and learning - is similar to *interpretivism* or *social constructivism*. *Constructivism* unlike *Phenomenography* is however, based on the assumption that, 'what students or learners have to do' is more important than 'what teachers do', to create or *construct* knowledge – the focus is on students' learning activities, rather than teachers' teaching activities. Teaching methods and styles, based on this theory are described as *constructivist-driven* teaching (Trigwell and Prosser, 1997). In contrast, the term *phenomenography* is derived from *phenomenology,* which according to Saunders et al. (2003:250) is concerned about the *'meaning ascribed to a phenomena'* – in this way it is similar to *interpretivism* and *social constructivism*. Phenomenography-driven teaching - unlike constructivist-driven teaching - is based on the assumption that the students' or learners' perspective defines what is learned, not what the teacher intends should be learned – teaching is therefore, a matter of changing the learner's perspective of the world (Marton, 1981; Marton and Booth, 1997; Biggs, 2003:12).

According to Biggs (2003:13), in order to improve the quality of teaching and learning, *constructivism* is more appropriate, because it provides a broad-based theoretical framework that is empirically sound, which helps teachers reflect on their teaching. Under *constructivism*, knowledge is not imposed or transmitted by direct instruction - it is constructed by the student's learning activities or approaches. Studies on students' learning activities by Marton and Saljo (1976:4-11) identified

two types of approaches to learning: 'surface' and 'deep' approaches to learning. A 'surface' or 'superficial' approach to learning requires 'passive' learning activities, such as 'memorizing' facts and details, as presented by the teacher, in anticipation of examinable questions. A 'deep' approach to learning however, requires 'active' learning activities, including setting out to understand meaning of facts and details, by seeking to explain, relate, apply and theorize facts (see Table 1.6, below). The terms 'surface' and 'deep', therefore, do not describe characteristics of students but their approach to learning a particular task. According to Biggs (2003:13), teachers should discourage *surface* learning, because, low cognitive level of engagement results in fragmented learning outcomes that do not convey the meaning as construed by the student; *deep* approach, however, should be encouraged, because it yields meaning as construed by the student.

Table 1.6
Students Learning Activities
Source: Based on the work of Biggs (2003:4-5)

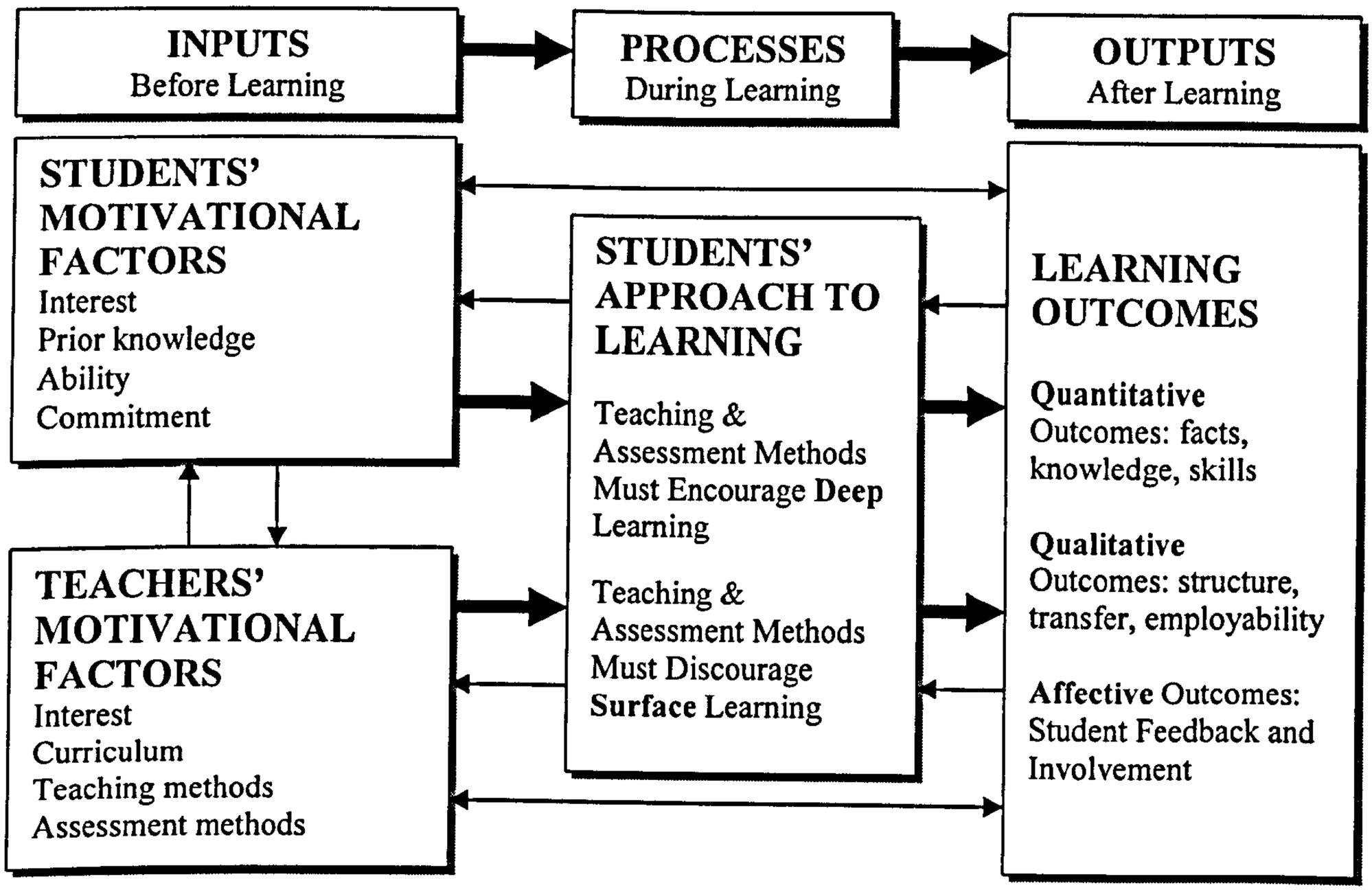
Factors	**Surface Learning**	**Deep Learning**
Level of Student Engagement	Low Cognitive Level	High Cognitive Level
Student Activity Required	**Passive Learning Activities:** Note-Taking; Memorizing; Describing	**Active Learning Activities:** Theorizing; Applying; Relating; Explaining.
Student's Ability	Non-academic	Academic

What students construct from a learning encounter depends on their motives and intentions, on what they know already, and on how they use their prior knowledge – meaning is therefore personal, from a constructivist point of view; however, what is common is the alternative, where, meaning is transmitted from teacher to student, as suggested by *phenomenography-driven* teaching (Biggs, 2003:13).

The quality of teaching and learning, from a systems theorist's perspective, is concerned with the quality of *inputs* (human and physical resources), the quality of *processes* (teacher-learner interaction) and the quality of *outputs* (graduates skills and knowledge) (Romizowski, 1981; Green, 1994:9). Dunkin and Biddle (1974) proposed a systems model of teaching, later extended to include learning, by Biggs (2003:18) (see Figure 1.7, below), which describes the objectives of teaching at three stages of learning: *Before Learning; During Learning; and After Learning has taken place.* The model shows that, the overall objective of improving the quality of *teaching* is to

improve the quality of *learning*. The heavy arrows show that, students' and teachers' motivational factors, jointly determine the learning approach a student may use for a particular task, and that in turn determines the learning outcomes – which may be measured in quantitative or qualitative terms. The light arrows connect everything to everything else, and include student feedback (Biggs, 1993).

Figure 1.7
A Teaching and Learning Model
Source: Adapted from Dunkin and Biddle (1974), Green (1994), and Biggs (2003:18-19)



The Quality of Inputs: Teachers and Students Motivational Factors

The *input* motivational factors identified by Dunkin and Biddle (1974), Perry (1988) and Biggs (2003:18), interact at the *process* level to determine whether or not students' are likely to adopt *surface* or *deep* approach to learning. These factors are known to sustain the motivation of teachers and students at the three stages of the learning process i.e. before, during and after learning takes place (see Table 1.7 below). Perry and Smart (1997) provided empirical evidence to confirm that some teachers have poor teaching records because of their inability to effectively communicate their knowledge to students before learning takes place. They argued that evidence of poor teaching, were ignored, where students compensate for the poor quality teaching they sometimes received by adopting a *deep* approach to learning at the 'process' stage, when learning is taking place. According to Biggs (2003:18), a

student with little prior knowledge of the topic will most likely adopt a 'surface' approach to learning, even where the teacher is well motivated. Another student who already knows a great deal about the subject, and is taught be a well-motivated teacher, will most likely use a 'deep approach'. He however, suggested that it is inappropriate to write off particular students as 'surface learners' and others as 'deep-learners' because there are no rigid categorisations.

Table 1.7
Input-Process-Output Factors
Source: Based on the works of Dunkin and Biddle (1974), and Biggs (2003:18-20)

Stages of Learning	Students' Motivational Factors	Teachers' Motivational Factors
	INPUTS	
Before Learning Takes Place	Interest in Subject or Topic	Individual Expertise in Subject or Topic
	Prior Knowledge about Subject or Topic	Ability to Communicate Knowledge
	Individual Ability	Teaching Climate
	Level of Commitment	Methods of teaching and assessment
	PROCESSES	
During Learning i.e. When Learning is Taking Place	Surface Approach to Learning	Level One – Level Two Theories of Teaching
	Deep Approach to Learning	Level Two – Level Three Theories of Teaching
	OUTPUTS	
After Learning has Taken Place	Knowledge or Facts	Knowledge Transmission
	Skills Acquired	Individual Contribution

A student, who finds out that 'surface' learning approach is not suitable for a particular task, may quickly adopt a 'deep approach to the task, in order to achieve stated learning outcomes (Biggs, 2003:18-19). With increasing rates of participation, the nature of the student body has become more varied, albeit, more in relation to the educational backgrounds they have experienced than to the innate talent they possess. Consequently, teaching will have to be highly skilled and appropriate to the diverse needs of the population (Perry and Smart, 1997). This appears to suggest that the nature of teaching and learning needs to be varied and versatile in order to encourage all students to adopt a deep approach to learning in the production of knowledge.

The Quality of Processes: The Teacher-Learner Interaction

Reflective Teaching and Reflective or Action Learning are effective and proactive theories of teaching and learning, based on the works of several researchers and writers with valuable experience in higher education. They include, Schon (1983), who dealt with the whole question of improving teaching processes by reflection, using examples from several professions; Brockbank and McGill (1998), who used Schon's (1983) Model to set up situations to promote reflection with colleagues;

Cowan (1998), who distinguished between reflective teaching and reflective learning; Kember (2000), dealt with how the quality of Teaching and Learning can be improved using Reflective Teaching and Action Learning, and Ho (2001), showed that reflective teaching and learning are linked to teaching and learning practices.

The processes of teaching and learning take place in an interactive system, in an institution with a particular mission statement, in a department that has a particular climate and philosophy, and involves interaction with other teachers and/or students, who may have different interests (Biggs, 2003). Even though some argue that teachers or students need to teach or learn in a way that, they can personally sustain and justify, more is achieved if they work together as a team, where every member is encouraged to adopt 'deep' approach to learning, rather than a 'surface' approach (Marton and Saljo, 1976; Entwistle and Ramsden, 1983; Biggs, 1987; Kember, 2000). The theories of reflective teaching and action learning, encourages both teachers and students to see the processes of teaching and learning as ongoing, cyclical, which require a teacher and a student to ponder over how they are handling teaching and learning; and how they might handle it more effectively. It adds cumulatively to their store of knowledge about themselves and of each other (Biggs, 2003:259).

Dunkin and Biddle's (1974) systems model shown in Figure 1.7 above, is based on three theories of teaching, which are dependent on three determinants of learning, applicable to the 'process' of teaching 'during learning'. These determinants are (1) what students are; (2) what teachers do; and (3) what teachers and students do – in ascending order of abstraction (see Table 1.8, below). Level One Theory of teaching and learning may be described as a 'reactive' theory, which encourages 'surface' learning. Level Two Theory is less 'reactive' and less 'proactive', which encourages some degree of 'deep' learning; Level Three Theory is the most effective, because it is 'proactive' and 'reflective', and encourages all students to adopt a 'deep' approach to learning. Dunkin and Biddle's (1974) model, depicts classroom teaching and student learning as an interactive processes, in which students' and teachers' input motivational factors, mutually determine ongoing *deep* and *surface* learning activities. The quality of learning p*rocesses* in turn determines the quality of learning o*utcomes*. For instance, students who use *deep* learning processes are known to achieve 'excellent' 'learning outcomes' defined in terms of assignment or examination grades (Perry and Smart, 1997; Biggs, 2003). The two main objectives of effective teaching

are therefore; first, to maximise the chances that students will use a *deep* approach; second, to minimise the chances that they will use a *surface* approach. That means adopting a Level Three Theory of Teaching and Learning as explained in more detail later below.

Table 1.8
The Three Theories of Teaching and Three Determinants of Learning
Source: Based on the works of Dunkin and Biddle (1994) and Biggs (2003)

Ascending Order of Abstraction	THEORIES OF TEACHING PROCESSES	DETERMINANTS OF LEARNING
Level One Theory	The Role of TEACHERS is to **Display** INFORMATION	**What Students Are**: The focus is on the STUDENT rather than the TEACHER. The Role of STUDENTS is to absorb the INFORMATION. If students do not have the ability or motivation to absorb information correctly, that is not the TEACHERS problem, but that of the Student. This encourages Surface Approach to Learning
Level Two Theory	The Role of TEACHERS is to **Explain** CONCEPTS and PRINCIPLE in the INFORMATION presented. To do this requires Skills, Techniques and Competencies. It is more reflective and sophisticated than Level One Theory.	**What Teachers Do**: The focus is on the TEACHER, rather than the STUDENT. This may encourage some students to use Deep approach to Learning.
Level Three Theory	The Role of TEACHERS is to **Encourage** appropriate Learning Activities. The task of Quality Teaching is two-fold. First, to maximise the chances that STUDENTS will use a DEEP approach to Learning. Second, to minimise the chances that STUDENTS will use a SURFACE approach to Learning.	**What Teachers and Students Do**: The focus is on both TEACHERS and STUDENTS. Teachers must help Students adopt a Deep approach to Learning rather than a Surface approach.

The three theories of teaching and learning are in order of increasing complexity and sophistication. Teachers tend to hold these theories at different points in their teaching career, some progressing to Level Three (the most complex and sophisticated), others staying at Level One or Two (Biggs, 1996a/b). These theories describe a sequence in the development of teaching skills: a route map towards teaching excellence (see Table 1.9, below). At Level One, the teaching process aims at transmitting information, usually by lecturing – so differences in learning are due to differences between students in ability, motivation, what sort of school they went to, 'A'- Level Results, and their innate approaches to learning (Biggs, 2003:21). Teaching processes are directly linked to learning processes and selective assessment processes for sorting good students from the bad after teaching is over (Biggs, 2003:22). Level One Theory teaching and learning is so widely accepted that delivery and assessment systems are

based on it. It represents a one-way delivery mechanism based on the assumption that, the teacher is the knowledgeable expert who expounds the information the students are to absorb and to report back accurately, according to their ability, their motivation, even their ethnicity (Biggs, 2003:22). The curriculum is seen as a list of items of content to be expounded, how students receive the content and what their depth of understanding of it might be are not specifically addressed (Biggs, 2003:22). It is a reactive, passive, unreflective and comfortable theory of teaching. If students do not learn, it is not that there is anything wrong with the teaching, but that they are incapable, unmotivated, foreign, or some non-academic defect, which is not the teacher's responsibility to correct.

Table 1.9
Three Input Motivational Factors and Three Theories of Teaching and Learning
Source: Based on the works of Dunkin and Biddle (1974), Trigwell and Prosser (1996) and Biggs (2003)

Order of Increasing Complexity	**Input Motivational Factors**	**Theories of Teaching and Learning**
Level One	Students' Motivational Factors	**Blame-the-Student Theory:** Learning as a Function of Individual Differences between Students' Motivational Factors. Level One Teachers see their responsibility as knowing their Subjects well, and clearly expounding it. Thereafter, it is up to the Student to Attend Teaching Sessions, Listen carefully, Take Notes, Read References, Remember Material for Assessment.
Level Two	Teachers' Motivational Factors	**Blame-the-Teacher Theory:** Learning is a Function of Teaching
Level Three	Effect of Teacher-Student Interaction	**Blame-sharing Theory:** Learning is a Function of Students Learning Approach derived from their Motivational Factors and those of their Teachers

Level Two, teaching and learning processes focus on teachers' and students' motivational factors, and aim at transmission and understanding of complex information in the form of concepts and principles (Prosser and Trigwell, 1998). The responsibility of getting such complex information across to students rests to a significant extent on 'what the teacher does' and to a small extent on 'what the student does'. The teaching and learning processes, require an armoury of teaching and learning skills, than Level One processes (Biggs, 2003:23). The focus is entirely teacher-centred it is about 'what the teacher is doing', not about 'what students are learning'. It is a 'blame-the-teacher' theory of teaching, based on teacher deficit, which is often preferred by administrators because it provides a rationale for making personnel performance appraisal decisions (Biggs, 2003:23).

Level Three Theory of Teaching and Learning focuses on all the core processes in the system, in particular students learning processes linked to teaching processes. It is therefore, a systemic and student-centred view of teaching, which sees teaching processes as supporting learning processes (Gow and Kember, 1993). It is not 'what teachers do' it is 'what students do' that is more important (Biggs, 2003:24). Level Three, teaching and learning makes use of teaching techniques that are linked to learning processes, which in turn are linked to specific learning outcomes. It is not just about facts, concepts and principles to be covered and understood, but also about what it means to understand content correctly and what kinds of teaching and learning activities are required to receive the required levels of understanding (Biggs, 2003:24). Defining levels of understanding is basic to clarifying curriculum objectives, and getting students to understand at the level required is a matter of getting them to undertake the appropriate learning activities. Assessment is a way of checking that, students' understandings and performances are what are desired. Level Three Teachers are those who create teaching environments to which students react by tuning their approaches to learning to suit the teaching environment.

The Quality of Teaching and Learning Outputs

Shuell (1986) argued that desired teaching and learning outcomes can be effectively achieved if teaching processes get students to actively engage in learning processes aligned to the desired learning outcomes. He puts forward his view clearly in Shuell (1986:429):

> *"If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes" (Shuell, 1986:429).*

Level One teaching and learning processes, are founded on quantitative thinking, about teaching and learning which manifests itself in quantitative assessment practices (Cole, 1990; Marton et al., 1993). Teaching and Learning Outcomes are quantified into units of knowledge of equivalent value: a word, an idea, or a point (Biggs, 2003:22). The correct ones are counted and converted by a common currency, usually a percentage, to make them interchangeable. The variability in teachers' performance and students' learning outcomes, are directly attributable to their individual motivational factors. Level Two processes focus on achieving a mix of quantitative and some qualitative outcomes (Biggs, 2003:23), which manifests itself in both

quantitative and qualitative assessment procedures. The assessment processes or procedures usually include the use of Students and Staff Satisfaction Surveys. Level Three outcomes focus on achieving the right balance between quantitative and qualitative outcomes derived from core teaching and learning processes (see Table 1.10, below).

Table 1.10
The Balance of Quantitative and Qualitative Outcomes from Teaching and Learning Processes
Source: Based on the works of Cole (1990), Marton et al. (1993) and Biggs (2003)

Core Teaching and Learning Processes at Different Levels	RELATIVE IMPORTANCE OF TEACHING AND LEARNING OUTCOMES	
	QUANTITATIVE	QUALITATIVE
Level One	Extremely	Not
Level Two	Highly	Less
Level Three	Highly	Highly

Quantitative and Qualitative Assessment of students, through examination and viva voce, is a way of checking that students' understandings and learning outcomes are what are desired. Good student learning outcomes, therefore, depends both on student-based factors – ability, appropriate prior knowledge, clearly accessible new knowledge – and on the teaching context, which includes teacher responsibility, informed decision-making, leadership and good management (Biggs, 2003:25). According to Perry and Smart (1997), potential employers who regard graduates as output from the HE system, are beginning to ask why the HE system has not used its own resources more effectively to develop appropriate knowledge and skill in its graduates. They argued that potential employers are no longer tolerating graduates who have a 'well rounded and trained mind' but whose knowledge and skills are unrelated to the needs of their businesses. This suggests that, training such generalist graduates would absorb large quantities of time and resources within the company.

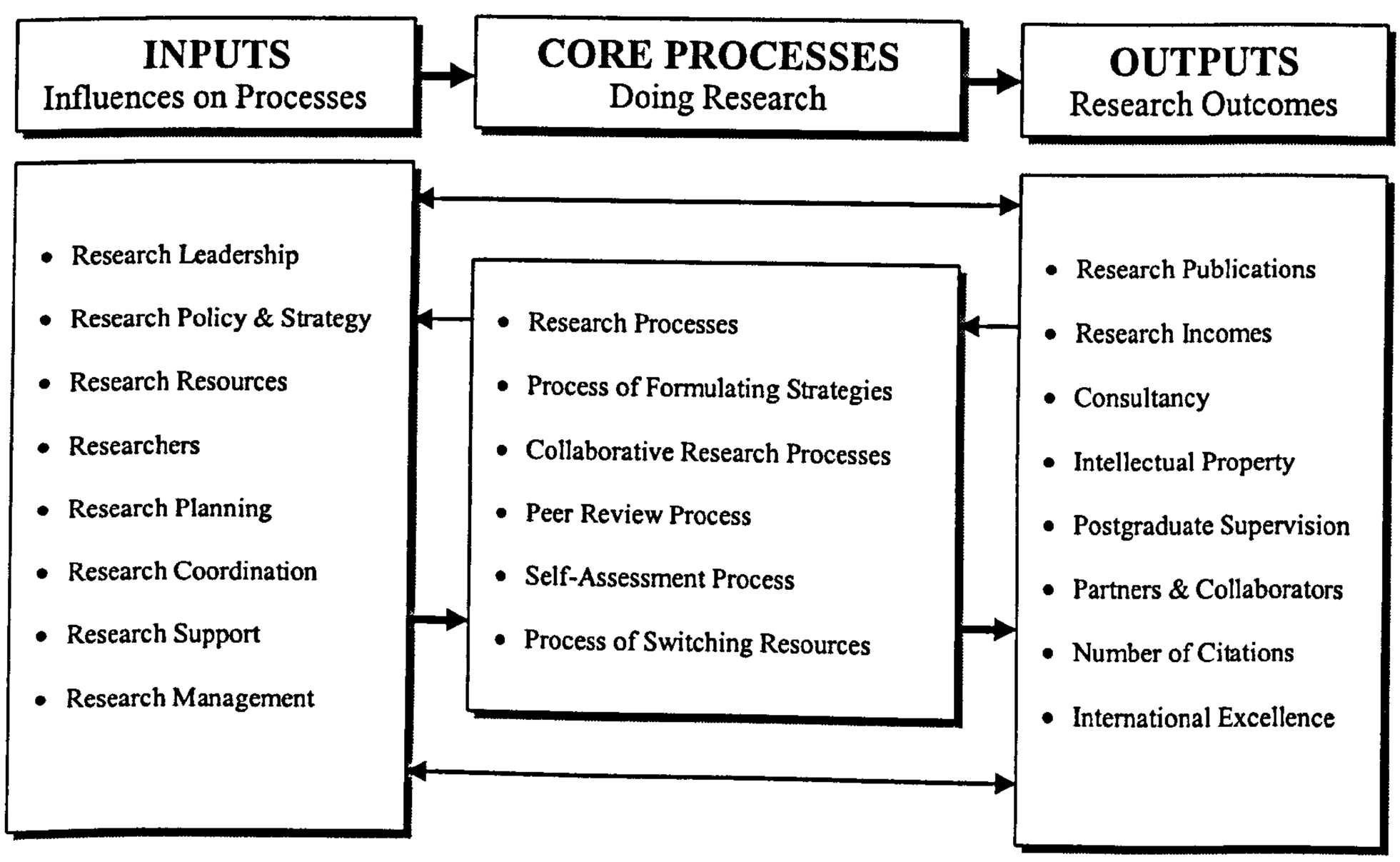
From the above review of relevant literature, we can see that, a *systems* approach by focusing on whole system of quality management offers a long-term solution to sustaining academic quality improvement. The next sub-section will apply systems thinking to research and scholarship activities in UK higher education institutions (HEIs).

Systems Theories of Quality of Research and Scholarship

University-based Research is a major driver for economic growth and is required to sustain a knowledge-based economy; there is therefore a need to develop research policies and strategies to encourage growth in new knowledge (Bushaway, 2003:7). As was the case under the previous section, which dealt with the *Theories of Teaching and Learning*, this section examines the quality of *university-based research* in terms of systems thinking, by reviewing first, the quality of *inputs* into research processes; second, the quality of research *processes* themselves; and third, the quality of *outputs* from research processes.

The works of Dunkin and Biddle (1974), Ackoff (1981), Romizowski (1981), Biggs (1993), and Bushaway (2003), on systems thinking, suggest that an *inputs-processes-outputs* model for research quality management can be developed, based on identifiable inputs, processes and outputs, as illustrated in Figure 1.8 below. According to these writers and researchers, improving the quality of research outcomes for a particular academic discipline, raises fundamental questions about how core research processes are integrated, in an environment of scarce research resources.

Figure 1.8
Systems Approach to Research Quality Management
Source: Based on the works of Dunkin and Biddle (1974), Biggs (1993), Bushaway (2003)



The model shows *inputs* as factors acting upon core research *processes*; the core *processes* in turn provide the framework for delivering excellent research *outcomes*. Before reviewing each part of the model in detail, the term 'research' and how it is linked to 'scholarship' will first be examined. This will be followed by a review of the key *inputs* into and *outputs* from core research *processes*.

Meaning of the Terms 'Research' and 'Scholarship'

The works of Dearing (1997), Churchill and Iacobucci (2002), Remenyi et al. (2003), Cohen et al. (2003), Saunders et al. (2003), and Bushaway (2003:4-7,142), show that the term 'research' – which is usually coupled with the term 'scholarship' or 'scholarly activities carried out by academic staff' - may be generally defined as a systematic process of investigation or enquiry, driven by intellectual curiosity and a sense of innovation and discovery, resulting in the production of new or improved knowledge for the creation of a 'knowledge-based economy' to increase productivity and to generate wealth for the individual and the state. Indeed, Bushaway (2003) provides an all-embracing definition of 'research' as follows:

> *"The process of undertaking or carrying out original investigation in all its forms: analysis, innovation, experiment, observation, intellectual enquiry, survey, scholarship, creativity, measurement, development, hypothesis, modelling and evaluating with a view to generating new knowledge or novel comprehension" (Bushaway, 2003:142).*

The definition sees 'research' as a 'logical process' comprising of different forms of investigation or enquiry. Robert W. Bushaway in his recent book: *Managing Research,* extended the definition of 'scholarship' to include the synthesis and routine testing and analysis of existing knowledge (Bushaway, 2003:18-19). The above definition suggests that the linkage between 'research' and 'scholarship' on one hand, and between 'research' and 'teaching' on the other hand needs to be well understand in order to sustain teaching and research quality improvement in a cost-effective manner. The Frascati definitions and types of 'research' and 'scholarship' - which were put forward by the Organization for Economic Cooperation and Development (OECD, 1998) - identified three categories of 'university-based research'. These are *Basic Research*, *Generic Research* and *Applied Research* as defined in Table 1.11 below. These definitions suggest that, the quality of research 'inputs', 'processes', and 'outcomes' depends on a clear definition and categorisation of the term 'research', and 'scholarship' prior to research or scholarly activities commencing.

Table 1.11
Definitions and Types of Research and Scholarship
Source: Based on OECD (1998), Bushaway (2003)

RESEARCH			SCHOLARSHIP		
BASIC	*GENERIC*	*APPLIED*	*APPLIED*	*CONTRACT*	*OTHERS*
Pure or Experimental or Theoretical Research	Strategic Research	Specific or Practical Research	Synthesis and Testing of Existing Knowledge	Knowledge-based Consultancy	Inventions, Innovations
Original investigation	Original investigation evolved from Basic Research	Original investigation	Original investigation evolved from Applied Research	Original investigation evolved from Basic Generic, and Applied Research	Original work
New Knowledge	New Knowledge	New Knowledge	New or substantially improved Knowledge	New or substantially improved Knowledge	New or substantially improved Insights
No particular Application	Practical Applications Possible and Feasible but cannot yet be specified	Practical Applications Possible and Feasible and already specified	Practical Applications	Theoretical and Practical Applications Possible and Feasible but not all can be specified	Practical Implementation of Knowledge

Bases of Research Organisation at the Micro and Macro Levels

Before turning attention to the quality of research 'inputs', 'processes' and outputs, it is useful to look at the basis on which research is organised in most UK HEIs, at both the micro and macro levels of the institution. At the micro level, for instance at the departmental or school level, research is organised in units - described by some as the 'Units of Research' or 'Research Units'. Bushaway (2003:143) describes a 'Research Unit' as being equivalent to a 'team or group of researchers', organized as a centre, department or school, with an operational budget, within which different research activities including teaching and learning are carried out in an integrated manner.

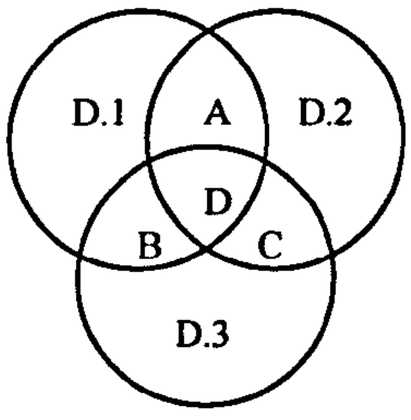
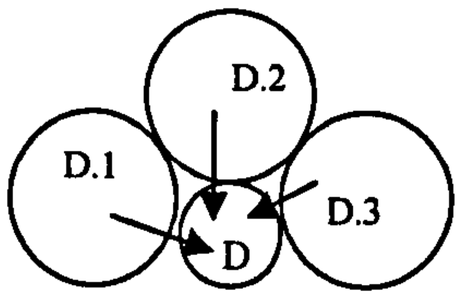
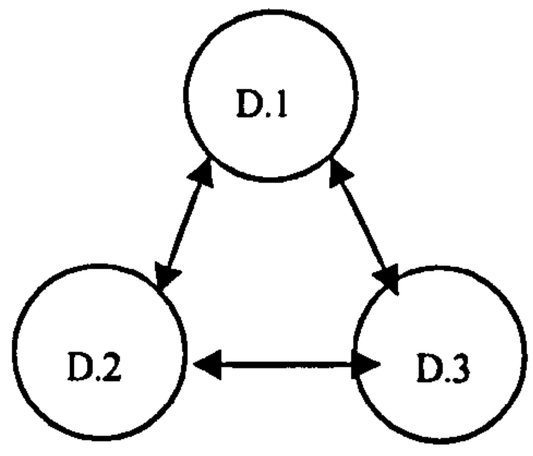
The team of researchers pursue different 'research themes', each varying according to their relative importance, the number of individual research projects, and relative amount of resources allocated to them. A 'research theme' is usually represented by a portfolio of several individual research projects, some are unique to the theme, others may be closely related to other research themes within the Research Unit; some will even cross unit boundaries, and involve collaborative work with one or more Research Units, in their successful development (Bushaway, 2003:144). The need for collaborative work, where research projects cross unit boundaries has led to increased

emphasis on collaborative research between disciplines in the UK. Some have argued for single discipline research, because of the natural allegiance to disciplines. They argued that in a world of complex knowledge one person can only know a lot about one subject, as such research specialization in one subject, ought to be encouraged. Those in favour of multidiscipline research, base their argument on the recognition that, research applications often require research approaches drawn from several disciplines or from the interfaces between disciplines (Bushaway, 2003:25).

Some UK HEIs have since the late 1970s, attempted to overcome the tendency to narrow research specialization, by implementing horizontal research structures rather than vertical structures. The establishment of 'research centres' to focus on different subjects or research themes, represents a horizontal research structure, bringing together researchers from different disciplines (Becher, 1989:1). These horizontal research structures have often led to the development of new or emerging single disciplines or relatively narrow research themes. Other horizontal research structures have favoured interdisciplinary networks, which extend beyond individual institutions to encouraged interdisciplinary research and teaching.

Some researchers and writers including, Bushaway (2003:25-27) identified three forms of 'research' collaboration explained in Table 1.12 below. These are (1) Inter-disciplinary Research work, (2) Multi-disciplinary Research work, and (3) Trans-disciplinary Research work. Table 1.12 is self-explanatory and includes collaboration in 'scholarship' or 'scholarly' activities. What stands out clearly from Table 1.12 is that there is a move from 'single' discipline research and scholarship to collaborative research in two or more disciplines – that is from 'single' to 'multiple' disciplinary approach to research and scholarship. This has serious implications for the effective management of collaborative partnerships, and consequently, the quality of 'inputs', 'processes', and 'outputs'. The literature in particular the works of Bushaway (2003) clearly suggest that, effective management of research at the micro or unit level is essential for maintaining the management of research and scholarship functions at the macro or strategic level of HEIs. They also suggest that, for an institution as a whole to maintain excellence in research outputs, it needs to put in place cost-effective structures and systems, which will sustain continuous improvement of research quality in all areas. The paragraphs below deal with some of the key factors, which impact on the quality of research 'inputs', 'processes', and 'outputs'.

Table 1.12
The Three Forms of Collaborative Research and Scholarship
Source: Adapted from Bushaway (2003)

INTERDISCIPLINARY	MULTIDISCIPLINARY	TRANSDISCIPLINARY
Interface Research or Scholarship Two or More Disciplines Research or Scholarship: Basic, Generic, Applied etc. Interface Between at least Two Disciplines e.g. Academic, Administrative and Support-service Quality Management **Example:** Disciplines: D.1, D.2, and D.3 Interfaces: A, B, C, and D  	**Integrated** Research or Scholarship Two or More Disciplines Research or Scholarship: Basic, Generic, Applied etc. Bringing together Core Theory and Practice from each separate Discipline **Example:** Disciplines: D.1, D.2, and D.3 Integration of Core Theory and Practice: D  	**Triangulatory** Research or Scholarship Two or More Disciplines Research or Scholarship: Basic, Generic, Applied, etc. Application of Tools and Techniques, and Findings from each separate Discipline **Example:** Disciplines: D.1, D.2, and D.3 Triangulation of: Tools, Techniques, Findings 

The Quality of Research Inputs, Processes and Outputs

The works of Warren (1994), Warner and Crosthewaite (1995), Watson (2000), Knight and Trowler (2001), Palfreyman (2001), Biggs (2003) and Bushaway (2003), identified key internal factors, which are critical for improving the quality of research inputs, processes and outputs in a higher education environment. They also gave examples of good practices associated with these factors (see Table 1.13, below). High quality research leadership, as an example of inputs into core research processes, such as planning, coordination and support processes, demands that leaders effectively communicate research goals, objectives, policies and strategies to all members of their research team; and to have in place the research infrastructure necessary for success in their fields. Group dynamic theory tends to indicate that around 10 individuals bringing a balance of skills to the task, makes an effective team, but leadership must be flexible enough to encourage groups to form, grow, change, interact, decline, transform and reform as fluidly as possible, on the basis of research performance measured against objective benchmarks (Bushaway, 2003). Effective research and human resource managers – as key inputs into research processes - are

described as those who successfully implement research and human resource strategies, relating to specific research projects within a research theme (see Table 1.13 below).

Table 1.13
Internal Factors Impacting on the Quality of Research Inputs, Processes and Outputs
Source: Based on the works of Bushaway (2003)

	INTERNAL FACTORS AND GOOD PRACTICES
A	**Inputs Factors and Examples of Good Practices**
1	**Research Leadership or Champions**
	Communicating Goals, Objectives, Policies and Strategies
	Establishing the requisite research infrastructure and environment for Research Unit
2	**Research Management**
	Successful implementation of research policy and strategy
	Control and coordination of specific research projects, within a Research Theme
3	**Human Resource Management**
	Enabling, facilitating and nurturing researchers
	Offering advice and guidance on research and funding opportunities
B	**Core Processes and Examples of Good Practices**
4	**Research Support Process**
	Research Information Management
	Management of Research Funds
5	**Research Planning Process**
	Formulating Research Strategy
	Integrating unit strategies with overall strategies in line with available resources
6	**Research Coordination Process**
	Balancing resources and matching them to priorities and projects
	Coordination of policy and procedures and strategy-setting
C	**Output Factors and Examples of Good Practices**
7	**Return on Investment in Research Infrastructure**
	Meeting Requirements of External Funding Bodies
	Meeting Requirements of Internal Stakeholders
8	**Social Responsibility**
	Meeting Requirements of External Funding Bodies
	Meeting Requirements of Internal Stakeholders

Researchers are those actually doing research as part of one or more finite research projects, an ongoing research programme, or simply in the context of a research career within a specific field. A research programme may consist of different periods of research carried out in a centre, department or school in the institution or beyond in other research organisations. According to Bushaway (2003:141), researchers might include: undergraduates; postgraduates; contract research staff; research fellows; research-active academic staff; visiting researchers, attached scholars or partner representatives; support staff (non-academic or academic-related staff employed to enable research to be carried out). There are no ideal or perfect number for the researchers in a research unit; larger teams are necessary for some research projects or themes; others depend on a critical mass of researchers to be effective; while in others the tradition of the independent and individual scholar persists (EPSRC, 1997; Bushaway, 2003:144).

A key task faced by research planning, coordination and support processes is how a research unit is allocated its resources across a number of distinct themes; this is achieved in terms of their relative importance and resource requirements, in order to define what research is to be carried out and to assign resources which can be measured against specific research outcomes (Bushaway, 2003:144). The resources allocated to individual research themes, usually includes: staff; accommodation; equipment and other facilities; other recurrent and non-recurrent resources (Bushaway, 2003:144). A difficult task is how to manage the process of closing down a particular unit of research or themes within it and switching resources to other units of research teams when a specific research area has ceased to be productive (Bushaway, 2003:145). The individual higher education institution must decide the method for allocating its resources for research and, therefore, the number, size and range of units, which undertake research.

An important aspect of the research support process relates to 'mode of funding research', which is essentially, determined by the research funder or sponsor. Only research funded internally by the university from its own trading activities and investments or by that stream of funding from its government-funded allocation can be deemed to be entirely free of conditions or requirements by external agencies (Bushaway, 2003:20). Three principal modes of external funding have been applied to university-based research; these are categorised as follows:

(1) University-Managed Research;
(2) Funder-Managed Research;
(3) University-Funder Managed Research.

These 'three' principal modes are explained in Table 1.14, below. For instance, on one extreme is the 'university-managed' mode of funding, which requires the university to select research themes within the remit of funding bodies; and to be directly involved in the management of individual research projects under each theme. On the other extreme is the 'funder-managed' mode of funding, which requires the funder or sponsor to specify the research theme and research projects it expects the university researchers to focus on, for a specified amount of grant, over specified duration, and based on agreed guidelines. The 'university-funder' mode falls between the two extreme positions.

Table 1.14
The Three Principal Modes of External Funding for University-Based Research in The United Kingdom
Source: Based on the work of Bushaway (2003:19-20)

University-Managed	Funder-Managed	University-Funder-Managed
University directs or manages the Research	Funding Body directs or manages the Research. Cooperation and Collaboration are encouraged between Researchers	University and Funding Body direct or manage the Research mutually contracted under a specific, well-defined set of conditions and requirements
Research Theme selected by the University must be within remit of Funding Body	Designated Research Theme or Programme from Funding Body with fixed or specific objectives and duration, with guidelines.	Contractor designates Research Theme against a fixed timescale with measured outputs and attainments
Research Proposal to focus on highly innovative and speculative ideas	Research Proposal to focus on highly innovative and practical ideas	Research Proposal to focus on specified intellectual property
Peer Review assesses QUALITY of the Research	Peer Review assesses QUALITY of the Research, often in conjunction with Programme Manager and a Steering Board.	Peer Review assesses QUALITY of the Research in conjunction with contractors
Applicable to Basic Research	Applies to Basic, Generic and Applied Research	Applicable to Generic and Applied Research
Funding in the form of GRANTS	Funding in the form of GRANTS	Funding in the form of GRANTS

As in the case of the quality of outputs from core teaching and learning processes, the quality of outputs from core research processes may be expressed in terms of 'quantitative' or 'qualitative' outcomes. For instance, examples of 'quantitative outcomes' include: number of research publications; annual research incomes, which is a measure of return on investment in infrastructure; number of patents; and number of citations. 'Qualitative' outcomes turn to measure the 'level of satisfaction' derived by clients from consultancy work; by students from research supervision; and from society's perception on the performance of the higher education institution in terms of dealing with environmental problems resulting from research activities.

Summary of Internal Factors impacting on Quality

Sub-section [C] identified internal factors impacting on teaching and research quality management practices in UK higher education institutions (HEIs). These 'internal' critical success factors are outlined below under 'four' broad categories:

(1) Leadership, Policy and Strategy;

(2) Financial and Human Resources for Quality Management;

(3) Process Improvement for Quality Management;

(4) Systems Thinking

- ***Leadership, Policy and Strategy for Quality Management***

Even though there are many alternative leadership styles, Knight and Trowler (2001) suggest that a people-oriented leadership style is more likely to lead to staff satisfaction, improved performance and group cohesiveness in higher education institutions. Empirical research by Brennan and Shah (2000:1) suggest that, policy can be formalised within a framework of implicit and explicit strategy, which describes institutions' sense of mission, purpose, plans and actions for implementation.

- ***Financial and Human Resources for Quality Management***

According to Williams (1999:152), in most UK higher education institutions, 'funding gaps' translate into a 'quality gap' where available operational resources are insufficient to sustain continuous quality improvement. Shortfalls in funding have seriously affected the ability of individual higher education institutions to make adequate provision for their human resource requirements, maintaining the infrastructure and to effectively manage their estates (Barnes, 1999:178).

- ***Process Improvement for Quality Management***

Kanji and Tambi (1999:144) and later by Osseo-Asare and Longbottom (2002:26-36) confirmed that 'process' is ranked by most UK higher education institutions as being more important than 'leadership'. Kanji and Tambi (1999) argued that it is strategically wrong to rank leadership second to processes, because the most important factor in the successful implementation of TQM is the 'total' commitment of top-leadership of the institution.

- ***Systems Theory of Academic Quality***
  - Teaching, Learning, Research and Scholarship

The literature on 'systems thinking' suggest that, a 'systems' approach to quality management offers a long-term solution to sustaining quality in higher education; primarily because it focuses directly on the assessment of the quality of 'inputs', 'processes' and 'outputs' (Beckford, 2002:176-190). The works of Dunkin and Biddle (1974), Palfreyman (2001), and Bushaway (2003), suggest that an inputs-processes-outputs model for research quality management can be developed based on identifiable inputs, processes and outputs. Empirical research by Palfreyman (2001) suggests that, only a few UK higher education institutions have adopted a 'systems approach' to quality management.

1.2.2. Models for Assessing, Assuring and Managing Academic Quality

This sub-section raises a wide range of issues relating to the role of strategic quality management in sustaining academic excellence. First, the concept of 'service quality' as a function of the 'gap' between consumers' *expectations* of a service and their *perceptions* of the actual service delivered will be reviewed; followed by a discussion of the need to integrate internal and external requirements for quality improvement. Second, a comprehensive review of alternative models for measuring quality in higher education as basis for improvement will be carried out. There are already over 25 alternative models for measuring and improving quality. These include the EFQM Excellence Model developed by the European Foundation for Quality Management (EFQM, 2003a); the Malcolm Baldrige National Quality Award (MBNQA, 2002) in the USA; and Kanji's Business Excellence Model in the UK (Kanji and Tambi, 1999). Some of these models are generic, and others have been specifically applied to higher education with some relative success (see Table 1.15, below). Prior to a review of these alternative models the theories underpinning alternative approaches to quality improvement will be critically reviewed. From the list of models shown in Table 1.15, we can see that, most of these models are based on the management philosophy of Strategic or Total Quality Management (TQM).

Table 1.15
List of Alternative Quality Management Models
Source: Based on Sources shown in the Table

No.	Name of Model	By/Year/Source	For Use In
1	SERVQUAL Model	Parasuraman et al. 1985	Services
2	Key Elements TQM Model	Spanbauer (1989)	Education
3	Critical Success Factors Measures of Quality Management Model	Saraph et al. (1989)	Product
4	Deming Prize	Deming (1991)	Product
5	Geddes' Model	Geddes (1993)	Higher Education
6	TQM Implementation Model	Coate (1993)	Higher Education
7	Philosophical and Systems Dimensions Model	Kanji et al. (1993)	Generic
8	TQM Model	Oakland (1993)	Generic
9	Generic Framework for Managing Quality Improvement	Boaden & Dale (1994)	Generic
10	Total Quality Leadership Model	Tofte (1995)	Education
11	Critical Success Factors of Quality Model	Thiagarajan (1995)	Generic
12	Quality Improvement Model	Clayton (1995)	Higher Education
13	Cause and Effect Model	Zadelhoff et al. (1995)	Higher Education
14	Aggregate Model of Quality Measurement	Owlia (1995)	Higher Education
15	Pyramid Model	Kanji (1996)	Generic
16	TQM Critical Success Factors Model	Black and Porter (1996)	Generic
17	Higher Education TQM Excellence (HETQMEX) Model	Ho and Wearn (1996)	Higher Education
18	Continuous Quality Improvement Cycle Model	Burkhalter (1996)	Higher Education
19	INTQUAL Model	Caruana and Pitt (1997)	Services
20	Kanji's Business Excellence Model	Kanji and Tambi (1999)	Generic
21	Malcolm Baldrige National Quality Award Model	MBNQA (1999)	Generic
22	European Foundation for Quality Management Excellence Model	EFQM (1999)	Generic
23	European Quality Improvement Systems	EQUIS (1999)	Higher Education
24	Organizational Excellence Model	Oakland's (2002)	Generic
25	Quality Assurance Agency Teaching Quality Model	QAA (2002a)	Higher Education
26	Higher Education Funding Council Research Quality Model	HEFCE (2003a)	Higher Education

This philosophy is critically evaluated in terms of its evolutionary trajectory from quality inspection, through quality control and assurance, to management of total quality, and beyond. The primary purpose for this review is to help identify the key weaknesses and strengths underpinning total quality strategy development, based on the believe that there is no one best philosophy or methodology for achieving and sustaining quality improvement in higher education – context is very important.

In the context of higher education, the focus of activity is on 'services' rather than 'products', with teaching and research functions as the main service areas; with some arguing that 'graduates' and 'knowledge' as the main outputs from the general system of higher education could be described as 'products'. The literature essentially defines 'service quality' in terms of meeting the needs and expectations of both internal and external customers; and measures the quality of a service, from consumers' or customers' perceptions of actual service delivered. The research studies by Gronroos (1984), Berry et al. (1985), Parasuraman et al. (1985), and Zeithaml et al. (1988), appear to conclude that 'service quality' is a function of the 'gap' between consumers' expectations of a service and their perceptions of the actual service delivered. These studies clearly relate 'service quality improving' to closing 'service quality gaps' or 'perception gaps'. The sub-section below examines the key measures of the quality of teaching and research services, from the perspective of the systems theory developed and applied to Teaching and Research functions earlier in this chapter under sub-section [1.2.1C].

A. The Tangible and Intangible Perception Measures of 'Service' Quality

The literature suggest that whereas 'product quality' rests largely on tangible measures; the determinants of 'service quality' are to a very small extent tangible, verifiable and auditable, but to a large extent intangible and are not verifiable and auditable after the service has been delivered (Dale, 1999:191-197; Beckford, 2002:12-13). The literature on systems thinking suggest that it is possible to identify *tangible* and *intangible* measures of service quality as 'inputs' i.e. before a service is delivered, 'processes' i.e. during the delivery of the service, and 'outputs' i.e. after the service has been delivered (see Table 1.16, below). The *intangible* measures relate to how the parties to the service transaction *feel* before the service is delivered, during the delivery of the service, and after the service has been delivered. Systems thinking therefore enables product or manufacturing-based models of quality to be used to deal

with the tangible determinants of service quality at the input, process and output stages of the delivery of academic services.

Table 1.16
Tangible and Intangible Determinants of Academic Service Quality from a Systems Perspective
Source: Based on the works of Dale (1999), Beckford (2002)

Stages of Service Delivery	Tangible Perception Measures	Intangible Perception Measures
Quality of Inputs		
Teaching	Teaching Funds; Infrastructure	Motivation and Commitment of Staff and Students
Research	Research Funds; Infrastructure	Motivation and Commitment of Researchers
Quality of Processes		
Teaching	Staff-Student Ratio	Teacher-Student Interaction
Research	Cost Per Research Project	Researcher-Peer Interaction
Quality of Outputs		
Teaching	Teaching Incomes; TQA Score	Employability, Staff and Student Satisfaction
Research	Research Incomes; RAE Score	National and International Reputation and Goodwill
Note: TQA = Teaching Quality Assessment		*RAE = Research Assessment Score*

The literature suggest that most of the models for 'service quality' focus directly on assuring the quality of 'processes', and indirectly on the quality of 'inputs' and 'outputs' - as is the case with the models developed by the QAA and the HEFCE in the UK , which will be discussed later in detail. However, Excellence Models based on TQM principles, encourage integration of the quality of inputs, processes and outputs; there are however serious doubts about the ability of these models to bring about real quality improvement, primarily because of the difficulty to successfully implement such models in a higher education environment. Studies on the direct interaction between service providers (teachers) and customers (students), includes Albrecht and Zemke (1985), Czepiel et al. (1985), Lewis and Entwistle (1990). These studies can be related to both teacher-student and researcher-peer interactions, during service delivery, and is commonly referred to by some as 'critical incidents' (see Table 1.16, above). Such interactions or encounters allow students and researchers to form an impression of the quality of teaching or research services they are receiving. The writings of Professor Barrie Dale in his book: *Managing Quality,* clearly suggests that, 'the quality of the teacher-student interaction is an essential element in the overall impressions and evaluation of the quality of teaching service experienced by the student as a consumer or customer (Dale, 1999:184).

Lastly, the quality of tangible 'outputs' from the system of delivery include the Teaching Quality Assessment (TQA) and Research Assessment Exercise (RAE) results, which reflects the quality of teaching and research respectively. The

intangible outputs include the 'employability' of graduates and the 'reputation' or goodwill of researchers and their respective institutions. In summary, teaching and research funds, infrastructure, and academic staff motivation and commitment to a service culture for improving service quality, are the noticeable *tangible* and *intangible* perception measures. These measures are required to effectively translate students needs into appropriate service specifications in order to narrow 'service performance gap', and thereby sustain the quality of inputs during actual service delivery, and to deliver high quality graduates and research outcomes.

B. Integrating Internal and External Quality Assessment Frameworks

This sub-section focuses on alternative frameworks for *internal* and *external* assessment of quality in higher education. It examines the role and importance of internal-assessment as an integral part of strategic quality planning, implementation and control. *Internal assessment* is one of the key elements in the 'general model' for quality assessment in higher education proposed by the European Union based on the work undertaken by van Vught and Westerheijden's (1993). In most HEIs 'internal assessment' is often a first stage in a process leading to 'external assessment'. Brennan and Shah (2000:13) argued that, in practice, *internal assessment* is driven by *external assessment*; that it is a question of power and values; and also that the choice of methodologies frequently involves changing the balance of power and value systems at all levels of management.

The term 'assessment' has been variously referred to as: evaluation; review; examination; audit; or appraisal, and may be carried out *retrospectively* or *prospectively*. A retrospective assessment compares past internal performance results with past external standards – the aim is external accountability; however, prospective assessment compares past internal performance results with future external standards – the aim is both internal and external accountability (Biggs, 2003:267-268). John Biggs in his book: *Teaching for Quality Learning at University* links prospective approach to quality assessment to quality enhancement (Biggs, 2003:268). According to the literature retrospective or prospective assessment, may be carried out in three modes: by the institution itself, i.e. internal assessment; independently by an external body, i.e. external assessment; or by the institution in collaboration with an external body (see Table 1.17, below). There is an apparent confusion in the literature over

whether the term 'self-assessment' is synonymous with 'internal assessment' or 'internal-external assessment.

Table 1.17
Appropriateness of Terminology
Source: Based on the works of Biggs (2003) and Brennan and Shah (2000)

No.	Assessment Mode	Assessment of Different Levels of the Institution or Area of Focus within it By
1	Internal Assessment	Internal Quality Assessors
2	External Assessment	External Quality Assessors
3	Internal-External Assessment	Internal and External Assessors

Internal assessment helps to satisfy the natural curiosity of management as to *'where'* their institution or area of responsibility stands at a particular point in time with respect to efforts to sustain continuous improvement in the quality of teaching and research. It therefore answers the question *'where are we now?'* with regards to the implementation of a formal programme of change. In effect it provides a *'situation analysis'* an evaluation and diagnosis of the current *'internal'* situation as basis for identifying strengths and weaknesses and formulating quality improvement policies and strategies and setting achievable objectives and targets. Although most authors agree that 'internal assessment' is a necessary step in the process of quality improvement, there is still intense debate about the merits and demerits of using either an internally or externally derived *methodology or mode* (Bartoli and Hermel, 1989; Bleicher, 1994; Brennan and Shah; 2000:12). External assessors or examiners have their own framework for conducting an independent examination of the level of teaching and research quality attained by an institution. This mode is preferred by science and engineering-based professional bodies for assuring the quality of provision in HEIs. According to Brennan and Shah (2000), national governments all over Europe are increasingly adopting the internal-external assessment mode, which involves internal assessors making judgement on the level of quality attained, followed by external assessors confirming or refuting claims made by internal assessors. This is the approach adopted in the UK by the QAA and the Higher Education Funding Councils of England, Scotland, Wales and Northern Ireland.

Even though, the *internal assessment* of academic quality is now a feature in many HEIs, the nature of the inputs, processes and outputs, involved varies significantly. From the works of Conti (1993, 1997), Hillman (1994), and the EFQM (1998), internal assessment may be defined as a comprehensive, systematic and regular review of an institutional quality improvement activities and results referenced against

an internally-derived model of academic excellence. This should allow the institution to discern clearly its strengths and areas in which improvements can be made, and culminate in planned improvement actions, which will be monitored for progress (EFQM, 1998). This definition suggests the use of a formal and/or informal model on which to base the internal evaluation and diagnosis. Formal and explicit models are mostly successful models transferred from industry and commerce to higher education. These industrial models include quality award models such as the MBNQA in the USA and the EFQM Excellence Model, and Professor Gopal Kanji's Business Excellence Model.

These models represent the many variations of TQM - the most frequently referred to systematic, theory-based approach to internal assessment (Brennan and Shah, 2000:12-13). Interestingly, there are only a few formal models developed by and for use in UK HEIs as shown in Table 1.15 on page 65. Informal and implicit models abound in UK HEIs, and are based on inter-personal relationships within the particular institution, such as:

- ***Quality of Teaching and Research Staff:***
  The advice given by a senior professor to a younger colleague; and the reputation of academic staff, measured by number of invitations to conferences and review of their publications;

- ***Quality of Students' Learning Experience:***
  This relates to the enthusiasm or motivation of undergraduate and postgraduate students.

Even though, the publicity given to quality assessment in recent years has been mainly concerned with, the growth of *formal-explicit models,* Brennan and Shah (2000:12) suggest that, the existence of older *informal-implicit models* should not be forgotten. They suggested the possibility of some internal assessment models falling between the two extreme forms, and that, it is possible and feasible to integrate the benefits of both the formal and informal models for internal assessment to ensure sustainability. The works of Reavill (1998), Dale (1999) and Blackwell (2002) also suggest that, the effectiveness of any internally derived model for quality assessment can to be found in the answers to the following questions:

- ***WHO*** carries out the internal assessment? This question can be divided into a whole set of subsidiary questions: *Who* initiates the internal assessment? *Who*

carries the internal assessment out? *Who* is expected to act on the internal assessment results?

- ***WHAT*** performance level and focus are we assessing? This question is partly a matter of *level*: the institution, a faculty, a department, a programme, and individual staff member. It is also a matter of *focus*: academic, administration, support services. Each focus can be broken down further; for example academic teaching may include content, pedagogy or both; academic research may focus on intrinsic academic quality and/or relevance and application; administration may focus on quality management or more general matters of institutional management and administration; support services may focus on ICT and infra-structural support.

- ***HOW*** is the internal assessment carried out? The 'how' question can have many answers. Surveys of student opinion, of performance and progression data, of the views of employers are all common. According to Brennan and Shah (2000), and Blackwell (2002:6-7), peer review or observation remains dominant in the assessment of research and is increasingly applied to the assessment of teaching.

- ***HOW OFTEN*** is the internal assessment exercise? The 'how often' question in part divides between *continuous* quality assessment processes and those which occur *intermittently*, but on a regular cycle. Most higher education institutions also undertake *'one-off'* assessments for particular purposes, for example to decide whether to merge two departments, or how to respond to a cut in funding.

Many authors and researchers including Reavill (1998:62), acknowledge that, any model for internal assessment, like the activities it assesses, is capable of improvement, and should be subject to assessment and improvement. They identified 'commitment' as the single most important issue to be considered when undertaking internal review of quality and performance. It means developing, gaining and sustaining the commitment of leadership at all levels of management and in all areas of activity to the internal assessment process itself and to the use of the agreed model for quality assessment. They also recognised the need to educate all leaders to understand the benefits and limitations of internal assessment as a driver for continuous improvement activity through a process of self-examination.

The Level and Areas of Focus for Internal Assessment of Quality

The levels of internal assessment in higher education include *institutional, faculty, school or college, departmental or divisional, and programme, course or subject* levels (see Table 1.18, below). In UK higher education, the QAA uses the internal-externally mode of assessment, which focuses directly on *academic quality* and indirectly on *management* or *administrative* and *support-services quality*. Some argue that a direct assessment of academic quality provides an indirect assessment of

administrative or management and support-service quality. However, many experts on totalising themes and sustainability including Professor Mohammed Zairi of the Bradford Management Centre, and Professor John Oakland of the European Centre for Business Excellence, see a lot of merit in adopting an integrated approach in order to sustain strategic quality management. In the UK, the QAA, the HEFCE, and Professional bodies progressively assess *academic quality* with the following objectives: *(1) Value from Public Investment, (2) Quality Improvement, and (3) Public Information* (HEFCE, 1994c:7). Accountability is the primary motivation, with quality and performance improvement also major objectives (HEFCE, 1997a:6-7):

"Quality assessment serves as a means of accounting for public investment in higher education, and for providing public information on the quality of higher education. It also serves to promote quality enhancement. It does this in a number of ways - through the requirement to state clear aims and objectives, the requirement for evaluative self-assessment, the process of interaction with peers, and the publication of reports which highlight areas to be improved as well as areas of high achievement" (HEFCE, 1997a:6-7)

Table 1.18
The Levels and Focus of Quality Assessment in Higher Education
Source: Based on information derived from HEFCE (1994c, 1997a), Brennan and Shah (2000)

<table>
<tr><th>LEVELS OF ASSESSMENT</th><th colspan="3">FOCUS OF ASSESSMENT</th></tr>
<tr><td rowspan="4">INSTITUTIONAL:
chancellery, strategic, top management level

FACULTY, SCHOOL, COLLEGE:
deanery, tactical, middle management

DEPARTMENTAL, DIVISION:
heads, tactical-operational management

PROGRAMME, COURSE, SUBJECT:
frontline, operational, lower management</td><td rowspan="2">ACADEMIC QUALITY</td><td>TEACHING QUALITY</td><td rowspan="2">Administrative Team</td></tr>
<tr><td>RESEARCH QUALITY</td></tr>
<tr><td rowspan="2">MANAGEMENT QUALITY</td><td>ACQUISITION OF RESOURCES</td><td rowspan="2">Support-Service Team</td></tr>
<tr><td>UTILISATION OF RESOURCES</td></tr>
</table>

Legitimacy of any model of quality assessment in higher education is commonly thought to be achieved through adherence to values and standards, which are a part of the cultures of academic disciplines (Becher, 1989; Becher and Kogan, 1992; Finch, 1997). Some writers however, argue that, legitimacy may be achieved through criteria other than disciplinary understandings – for example, customer satisfaction, value for money, and relevance to economic growth (Brennan and Shah, 2000:18). The emergence of Quality Award models appear to answer these question in providing a generic and holistic set of criteria covering a wide range of performance management issues (Osseo-Asare and Longbottom, 2002). Finch (1997:152) sets out the implications starkly:

"The whole of the academic enterprise depends on there being a reasonably clear collective understanding between academics in a given discipline that a particular piece of work counts as good and something else as less good. Without that collective understanding, academic disciplines really do not exist. Were that to disappear, the resulting intellectual anarchy would bring down the whole edifice, since there would be no reason at all why taxpayers should pay us to educate the young, nor why sponsors should pay us to conduct research" (Finch, 1997:152)

The Higher Education Funding Councils (HEFCE, 1994c:7) and many other researchers, including Reavill (1998:62) identified *teaching* and *research* as critical academic areas, which need regular monitoring for quality and performance improvement (see Table 1.18, above). With regards to Teaching Quality, the HEFCE (1994c:8) monitors different aspects of provision, which includes: curriculum design; content and organisation; teaching, Learning and Assessment; student progression and achievement; student support and guidance; learning resources; quality assurance and enhancement. Academic quality assessment at the subject or programme level can affect the status and influence of departments: 'successful' assessment enhancing them, 'unsuccessful' assessment damaging them (Brennan and Shah, 2000). From the literature it appears there is a hierarchy of quality and performance improvement areas in higher education. This is depicted in Table 1.18 above. For instance, improvements in administrative and support-services related to teaching quality are expected to lead to improvements in Teaching Quality Assessments (TQAs). Improvements in TQA are expected to lead to improvements in Academic Quality, which in tend would result in improvements at institutional or other levels of assessment. It suggests that improving the quality of administration and support-services would lead to improvement of academic and management quality. This will ultimately lead to improvement in quality and performance at the different levels of assessment; and in the very long term the achievement of the mission of the HEI - assuming teaching and research remains the only long-term goals of higher education. The integration of models for improving the quality of support-services and of administration is therefore of paramount concern in seeking to improve academic quality, and ultimately institutional quality and performance. This may be described as a bottom-up approach to quality management.

The Structure of Internal Assessment Models

Internal assessment of the quality and performance of management is controversial because it affects the distribution of power, and may require changes in the value systems, and structures within HEIs. According to Brennan and Shah (2000:15),

ownership and control over the internal assessment processes are disputed because the assessment affects the acquisition, allocation and utilisation of scarce resources including funding (Brennan and Shah, 2000:15). The structure of the internal assessment model is also influenced by the requirements of external-assessment, which include *assessment visits, judgements*, and *reports* (HEFCE, 1994c:8). External assessors place emphasis on the validation of the internal assessment procedures to include a statement of the aims and objectives of programmes, data on students achievement and learning experience, data on staff, and of learning resources (Reavill, 1998:60). Reavill (1998:61) and Brennan and Shah (2000) provide empirical evidence to suggest that the pressure exerted by external assessors does stimulate internal quality improvement by the simple relationship between performance improvement and outside attention to the task of improving quality (Reavill, 1998:61).

The ratings given by publishers of League Tables are based on published statistics covering the various aspects of the performance of a particular HEI. These ratings are also known to provide a stimulus to the internal assessment effort, even though not all HEIs are able to manage the pressure (Reavill, 1998:61). There is also empirical evidence to suggest that it is possible to integrate the requirements of both internal assessment and external assessment of academic quality through the application of strategic quality management principles. Applying strategic quality management principles to internal assessment processes, according to Reavill (1998:61), means looking for limitations in the external quality assessment methods used by external assessors, and finding ways by which the internal quality assessment can be enhanced. This approach is adopted in this doctoral study in the creation of *theory* and development of a *model* for academic quality management.

The Structure of External Assessment Models

Even though many 'external' models for assessing the quality and performance of management have been successfully implemented in both private and public sector organisations, very few have been successful in HEIs. The main reasons for the implementation difficulties include scepticism about and misunderstanding of what these models are intended to do, and the lack of transformational leadership (Kanji and Tambi, 1999; Osseo-Asare and Longbottom, 2002). The literature seem to suggest that, "all hell would break loose if an external body attempts to review the quality of management". Much of the literature on higher education emphasises the

autonomy of institutions and the basic units within them and, in particular, the autonomy and power of tenured academic staff (Clark, 1983; Becher and Kogan, 1992) - the assessment of academic quality not alone management quality threatens this. By emphasising *collectivity, transparency* and *accountability*, quality assessment seems destined to alter the organisational role of departmental leaders, senior academics and administrators (Brennan and Shah, 2000:17). Whatever the variations in the methodology adopted by most external models, the emphasis on procedures and on conclusions based on evidence appears to be at odds with conceptions of quality based on the status of individuals managing the institution. Some researchers and authors including Brennan and Shah (2000) have argued that, those who have traditionally enjoyed the most status and power within HEIs may be the greatest losers from the introduction of quality assessment in academic and management areas (Brennan and Shah, 2000:17).

In much of the literature on quality assessment, the question of impact is treated as one of the extent of presumed improvement or enhancement. This is one of the ideological problems of the debate about quality in higher education. The notion of 'improvement' is ideological, assuming values and criteria against which management quality is judged. Most academics and administrators in higher education see both internal and external assessment as a means of challenging and attempting to change existing balance of power and system of values. As such what is 'improvement' from academic point of view may be 'damage' from administrative or management point of view (Brennan and Shah, 2000:13). Internal and external quality assessment is controversial because both challenge academic autonomy, affects resource allocation, and ownership and control over assessment procedures, are frequently disputed. Drawing on the work of the sociologist, Max Weber, Finch (1997:152-153) drew a distinction between 'naked power' and 'legitimate authority' with regard to decision-making in higher education. Institutions with 'naked power', in Finch's (1997:153) terms, possess 'the ability to pursue their aims despite the resistance of others'. Most national quality agencies like the QAA and the HEFCE arguably have 'naked power' derived from the state and at least in principle linked, to the exercise of state power through legislation and funding (Brennan and Shah, 2000:15). Some academics and administrators in higher education exercise 'naked power' and adopt a 'management by misinformation' style of allocating scarce resources (Osseo-Asare and

Longbottom, 2001). The works of Frederiks et al., (1994), Rasmussen, (1997), and Maassen and Westerheijden, (1998), questioned whether long-term stability in the higher education industry can be achieved on the basis of 'naked power' considering that decisions made in this way would tend to be resisted or subverted. What was necessary was the conversion of 'naked power' into 'legitimate authority' through a successfully implemented assessment methodology (Brennan and Shah, 2000). Brennan and Shah (2000) argued that national quality bodies such as the QAA have to strike some kind of balance between representation of the interests of institutional management, the academic profession more widely, non-academic interests and the agents of the state.

The Need To Integrate Academic and Non-academic Quality

The last few decades of the 20th century saw a global trend toward development and enhancement of *academic quality* (Sallis, 1996; Hodson and Thomas, 1999). However, so far as research and development in academic quality is concerned, most work has been in the academic areas of teaching and research, few in the areas of *administration*, and very little in the areas of *support-services* although arguably all three areas share the same mission (Yu et al., 2000:517-518). Hoffman and Julius (1995) noticed that the mission statements of most HEIs have begun to emphasize the need to move 'quality' towards 'excellence' in all areas including administration and support-services. This appears to suggest the need for an integrative development and management approach to quality management covering academic, administrative and support-service areas. A meaningful assessment of *academic quality* perhaps needs to include the assessment of the quality of the key sub-areas under administration: human resource development and management, accounting and finance function, performance evaluation and reward systems, and social responsibility and impact on society (Yu et al., 2000:518).

According to Kwang and Chuan (2000:494) because both the administrative department in higher education and a service organization aim to provide quality services to their customers quality in administration is comparable to quality in service organization thus equating administrative quality to service quality. Empirical evidence from US higher education suggests that it is possible and feasible to apply best practices in service industries to administrative departments in higher education, there is however little evidence to prove that is the case in UK HEIs (Seymour and

Associates, 1996; Kanji and Tambi, 1999). Most management researchers including Yu et al (2000:517) agree that support-services represent services, which support and complement the activities of both academic and administrative departments, and comprise of: student development services, facilities management services and laboratory services which provide specialised equipment and facilities to students. The work of Thomson (1999:104-106) suggests that HEIs are communities that nourish capable professionals and administrators as well as incubate new knowledge and technology. This suggests that besides the core academic departments, these institutions are self-contained with support-service departments that care for students' social life and personal development, surrounding ambience, campus facilities and specialized and sophisticated equipment. This according to Yu et al. (2000:520) means that, a quality management system is needed to establish proper procedures for maintaining and improving the quality of the support-services provided.

C. Meaning and Applicability of TQM in Higher Education

This sub-section examines the definitions, concepts and some of the key principles of Total Quality Management (TQM), and then critiques its applicability in HEIs, and its links to alternative models for quality management listed earlier in Table 1.15. Much of the work on TQM is traced to the writings of quality gurus such as Deming (1986) and Juran (1988) who are particularly remembered for their work in Japan during the 1950s, and the revolution that followed in the USA in the 1980s. Since then, TQM has gained much attention, with many articles and books written on the subject (Dale, 1999; Oakland, 2003). By the mid-1990s, however, the meaning of TQM was still unclear, partly, because of the existence of concepts such as: *Total Quality Control'* (Feigenbaum, 1956), *Company-wide Quality Control* (Ishikawa, 1985), *Strategic Quality Management* (Garvin, 1988), and *Total Quality Improvement* (Lascelles and Dale, 1991; Harari, 1993; Zairi, 1994a). At the time the similarities and differences between these concepts were not well explained and as a consequence many organisations failed to successfully implement TQM. Cynics have capitalised on such failures to argue that TQM was simply a 'management fad' (Binney, 1992; Harari, 1993; Hackman and Wageman, 1995),

Since the mid-1990s TQM advocates have offered a much better interpretation of what TQM really means, as a result TQM has become firmly grounded in almost

every industry, with its spread from the private sector to the public sector including higher education, and progressive organisations are embarking on a journey of transformation towards TQM (Boaden, 1997; Hellsten and Klefsjo, 2000; Helms et al., 2001:322). TQM advocates including Becker (1993), Zairi (1994a), George and Weimerskirch (1995), Ghobadian and Gallear (1996), Flood (1996), and Oakland (2003) therefore see it as the single most important framework for propelling and achieving business success through continuous improvement and a way of life for many corporate enterprises. A view shared by the United States General Accounting Office (1991). Zairi (1994b:6) argued that TQM is not imposed on people but that, customers are demanding it through increased demand for: (1) *Quality Products and Services; (2) Speed and Reliability of Delivery; (3) Affordable Prices; (4) Innovation and Differentiation; and (5) Increased Demand for Professionalism*. He also argued that the problem is one of attitudes and behaviour, and that top management commitment and a customer orientation are needed for it to succeed (Zairi, 1994b:7).

The 'Real' Meaning of Total Quality Management

Many academics and practitioners now agree that TQM is both a quality-centred philosophy and a set of guiding principles for effective management of an organisation (Zairi, 1994b:6; Dale, 1999:9). There are a number of useful formal definitions and interpretations of TQM and the terminology used continuous to evolve. For instance, TQM has been defined in terms of the following basic principles and practices: (1) *doing things right the first time; (2) striving for continuous improvement; (3) fulfilling customer needs;* (4) *making quality the responsibility of every employee; (5) working with suppliers to improve the quality of raw materials; and (6) establishing methods for measuring the quality of outputs* (Harrington, 1987; Helms et al., 2001:326). More formally TQM has been defined as:

- *A management philosophy for delivering long-term benefits (Zairi, 1994b:6-7);*
- *A management approach centred on quality, based on the participation of all its members and aimed at long-term success through customer satisfaction, and benefits to all members of the organization and to society (ISO, 1994)*
- *A management strategy for change in an environment of constant challenges, concerned with developing an organizational culture in which people are able to meet these challenges and realize the opportunities of change (Dale, 1999; Oakland, 2003)*

- *A management process of changing the culture of an organization and redirecting it toward superior product or service quality Gaither (1996);*
- *A management process requiring mutual co-operation of everyone and associated business processes to produce products and services which meet and hopefully exceed the needs and expectations of customers (Dale, 1999:9);*
- *A management system consisting of values, techniques and tools and based on a process of continuous improvement that has evolved through stages of quality inspection, quality control and quality assurance (ISO, 1994; Dale, 1999:3-4);*

Professor Mohammed Zairi, gave an all-embracing self-explanatory definition of TQM, which encapsulates all the above definitions:

"TQM is essentially a whole array of techniques, management principles, technologies and methodologies which are put together to work for the benefit of the end customer. TQM seeks to develop organizations by creating better planning, better external focus, better design and prioritisation. It is also aimed at strengthening weak processes and protecting strong areas, which give the organizations concerned an edge over their competitors (through continuous improvement and benchmarking). TQM helps organizations build strong capability enabling them respond to current and future market pressures. It ensures that the voice of the customer (level of demand) is always matched by the voice of the process (level of delivery ability). TQM values people and people productivity through innovation, creativity, problem solving and a commitment continuously to improve quality and optimise value-creation for the benefit of the end customer. TQM is a corporate-wide process and has to involve all levels of employees. In addition, TQM is about the continuous process of introducing best practice to ensure sustainability and positive competitiveness. In a sense, it is about the management of change; it is therefore limitless and timeless in its approach" (Zairi, 1994b:6-7)

These definitions identified several key elements of TQM, which form the main criteria and sub-criteria of TQM-driven Excellence Models. TQM is therefore, not a single concept, but a convergence of ideas, concepts, principles and practices, emanating originally from the work of the quality gurus and from those of recent TQM advocates. Of all the key elements of TQM, *'transformational leadership'* stands out as the single most important success factor driving change, which according to Bennis and Nannus (1985), focuses on *(1) attention through vision (2) meaning through communication (3) trust through positioning and (4) the development of self-through positive self-regard.* Most failed attempts at introducing TQM in higher education are a result of poor *'leadership'*. According to Zairi (1994b:10) transformational leadership in the context of TQM is not about *power, authority* and *control*, it is about *empowerment, recognition,* and *coaching* others.

The idea of integrating different ideas, concepts, principles and practices is not new. socio-technical or socio-economic schools try to merge different approaches in order to better respond to management and organisational challenges. Independently of any

management school attachment, authors try to combine diverse aspects, for instance: *strategy, continuous improvement,* and *transfer of knowledge* (Beechner and Hamilton, 1999), *vision, strategy* and *learning* (Martensen and Dahlgaard, 1999), or simply *'hard'* and *'soft'* (Peters and Waterman, 1982). These efforts paved the way towards more globally integrated TQM-based Excellence Models. The literature suggest that there is no universally agreed quality management 'model' in higher education based on TQM. However, there is some agreement on the 'tools and techniques' for improving and managing the quality of teaching, research and of the services provided in a higher education environment (Helms et al., 2001:326). The objective of a TQM-driven model is to build an institution that produces graduates and provides administrative services that are considered as quality by end user customers. The difficulty however, is that there are still variations in the definition of a customer in higher education. It is important to know who the customer is because the customers define quality in terms of their perception of the degree to which the product or service meets their needs and exceeds their expectations (Gaither, 1996). It helps to clearly establish relevant measurement criteria for evaluating teaching, research and service quality (Helms et al., 2001:326). It however, remains difficult to know the extent to which customer perceptions should become reality for quality management strategists in higher education.

The Applicability of TQM in Higher Education

Many academics and administrators since the early 1990s frequently ask the question whether or not true TQM is applicable on campuses. In the light of higher education revenue shortfalls, expenditure pressures, and controversies that have shaken public confidence in higher education, most HEIs world-wide are urgently looking for performance improvement models which have been successfully implemented by industry and commerce (Helms et al., 2001:326). TQM principles are being addressed in higher education, particularly as they relate to productivity and financing. In 1991 a Total Quality Forum was held in the United States of America, to discuss the role of TQM on American campuses with particular reference to business and engineering schools (Harvard Business Review, 1991). The Forum saw TQM as a powerful competitive weapon for maintaining and enhancing the global position of a university. The Forum Participants argued that HEIs which were slow to embrace TQM, at best miss the opportunity to lead change and at worst run the risk of becoming less

relevant to the world of business (Harvard Business Review, 1991). Despite the above laudable benefits, the Forum recognised the lack of enthusiasm on the part of HEIs adopting TQM. It observed that widespread adoption of TQM was moving too slowly to meet global challenges. Since the Forum, the situation in the US has changed dramatically, many more universities started to adopt TQM (Lozier and Teeter, 1996; Kanji and Malek, 1999) and the higher education sector has undergone major changes in curriculum focus and student management (Kwang and Chuan, 2000).

'Total' in TQM focuses more on *'institution-wide'* or *'corporate'* performance rather than just individual faculty performance (Zairi, 1994b:10). *'Total'* may also refer to the *level of commitment* expected from top management of HEIs. Literally, *'total'* may mean *'everyone'*, involved in *'everything'* in *'everyplace'*. According to the literature without the *'total'* commitment of top management nothing much will happen (Dale, 1999:10). Some writers argued that TQM does apply equally to all functions and activities of a HEI, and all areas such as academic, administration and support-services (Brennan and Shah, 2000:14). Many HEIs in the USA have implemented TQM in two major areas: *(1) Academic i.e. teaching and research (2) Administration as a service* (Helms et al., 2001:327). Another interesting dimension to a *'totalizing theme'* - using Scott's (1995:3) terminology - is the fact that TQM seeks to involve *everyone*, in *every area* in the decision-making process and in quality improvement activities. This perhaps is *idealistic*, *totalitarian authoritarian* and *not politically correct* in a modern higher education environment where most academics like to keep themselves to themselves. 'Management' in TQM may be defined in terms of *'what managers do'*, which comprises of *planning, implementation and control* activities, which involves them having to *make decisions* about alternative choices. Quality managers in HEIs are expected to make quality improvement decisions as part of quality management efforts within their respective institutions.

While there is much intuitive support for TQM, few empirical studies exist in the UK to support the use of true TQM in higher education (Helms et al., 2001:327). Even though there are already many TQM models for higher education as shown in Table 1.15 earlier, Helms et al. (2001:327) called for a new model of TQM along with a modification of the principles of TQM for the unique culture of the academic profession. Some of these models were developed by institutions to serve their particular need and may not be suitable for use by other institutions. Another

shortcoming of some of these models is that, although they are claimed to be successful, they have not been validated by empirical data.

TQM has made its way into HEIs in many developed countries including the United Kingdom (Kanji and Tambi, 1999:129). Studies applying TQM to higher education environments include Bailey and Bennett (1996), Coate (1999), Costin (1999), Evans (1996), Marchese (1999), Mergan et al. (2000) and Vazzana et al. (1997). HEIs the world over and in particular in the USA have been influenced by the manner in which many large corporations, such as Texas Instruments, Xerox, IBM and Motorola came out of crisis through successful implementation of TQM (Lozier and Teeter, 1996). They were also influenced by the critical state of education in the 1980s in terms of student grades, funding, and complaints from employers and parents. Even though TQM has been a positive experience in business organisations (Lawler et al., 1996) it has had limited success in educational administration (Meisel and Seltzer, 1995; Barnard, 1999; Bonvillian and Dennis, 1995; Miller, 1991). According to Helms et al. (2001:322), some HEIs in the US have successfully used TQM to improve *administrative quality* but have found little success in improving *academic quality* in the areas of teaching and research primarily because of strong tenure systems in place. Following the successful application of TQM at Fox Valley Technical College in the USA (Narasimham, 1997), many other institutions including Pennsylvania State University, the University of Wisconsin-Madison, North Dakota University System, and Oregon State University began to implement TQM (Seymour, 1992; Lozier and Teeter, 1996).

In 1996 about 160 universities in the US had or were in the process of applying TQM; with approximately 50% of them establishing an organisational structure for TQM (Burkhalter, 1996). This number has since gone up dramatically following the introduction in 1999 of the Educational Criteria for the Malcolm Baldrige National Quality Award (MBNQA), which rewards educational institutions for adopting TQM using the Award Criteria. In contrast, the pace of change has been rather slow in European HEIs. There are only a small number of initiatives in UK HEIs. Doherty (1994), mentioned South Bank University, University of Ulster, Aston University and Wolverhampton University as having formally adopted TQM and have derived a number of benefits including improved student performance, better services, reduced costs and improved customer satisfaction from successful implementation. Despite the

slow start, Kanji and Tambi (1999:131) argued that UK HEIs are moving closer to adopting TQM principles by way of their increased customer focus, the need for quality management and enhancement, and using benchmarks. A relatively few number of UK HEIs have already started experimenting with TQM-driven Excellence Models like the EFQM Excellence Model with some success (Osseo-Asare and Longbottom, 2002).

Beyond TQM and TQM-driven Excellence Models

Garvin (1988) and Dale (1999) identified four hierarchical stages in the development of quality management activities or approaches. These are *inspection-based, control-based, assurance-based* and *strategic-based* activities - as shown earlier in Table 1.3 and Figure 1.6 on pages 13 and 38 respectively. Table 1.19 below explains each stage in detail. Bounds et al. (1996), Flood (1996) and Oakland (2003), believe that the *strategic-based* approach to quality, is indeed consistent with TQM at least in philosophy if not in methodology. Most researchers and practitioners including Oakland (2003), Ho and Fung (1994:27) and Dale (1999) agree that inspection-detection-based approaches precede the evolution of prevention-based approaches to quality management. Inspection-detection-based systems are inherently inefficient in that they represent extra effort, and therefore costs over and above what has been budgeted. Unlike, prevention-based approaches, they are not ideal for engendering Team spirit, co-operation and a good climate for work, and organisations operating in inspection-detection-based environment are often preoccupied with short-term survival and little concerned with delivering 'real' quality improvements (Dale, 1999). According to Dale (1999:9), the limitations of inspection-detection-based approaches can be overcome by adopting *strategic, proactive, prevention-based approache*s, which define a *'process'* by its inputs of people, machines or equipment, materials, methods, environment and management. It brings a clearer and deeper sense of responsibility for quality, and eliminates the root cause of waste and non-value adding activities. Management of 'Total Quality' or Strategic or Total Quality Management (TQM) is the fourth and so far the highest level or stage in the evolutionary ladder. According to Dale (1999), at this stage, systems, procedures and quality improvement requirements and responsibilities are usually the same as those at the Quality Assurance level, but they pervade every person, every activity and function at every level of the organisation.

Table 1.19
The Benefits and Limitations of the different approaches to quality management
Source: Based on information from Garvin (1988) and Dale (1999)

APPROACHES	BENEFITS	LIMITATIONS
INSPECTION-BASED *It is based on the belief that non-conforming products or services must be made before the process can be adjusted. That conformances are due to the product or service not being inspected enough. That operatives are the sole cause of the problem, not management of the system.*	The primary aim is to Identify operations, workers and suppliers, who are producing products or services not conforming to specifications. Applied to key 'appraisal points' in the delivery or production processes. This is quality management at operational level of organisation, in an inspection-based environment.	An after-the-event activity, requiring reactive quick-fix corrective actions, with no prevention content. Inspection is the primary means of control in a 'policeman' or 'goalkeeper' type role and thereby a 'producing' versus 'checking' situation is encouraged, leading to confusion over people's responsibilities for quality..
CONTROL-BASED *It is based on the belief that non-conforming products or services cannot be avoided and should be allowed before the process can be adjusted.*	A detection-based or a fire-fighting system, capable of replacing or supplementing simple inspection-based systems, which lead to greater process control and fewer incidence of non-conformances. This is quality management at operational level of the organization, with some tactical level support, in a fire-fighting or detection-based environment.	There is the tendency to continue fire-fighting and rectifying the same problems desperately week after week, month after month, and year after year. All activities are still 'after-the-event' and backward looking.
ASSURANCE-BASED It is based on the belief that some non-conformance may be allowed. That preventing non-conformance improves quality.	A shift from detection towards prevention of non-conformances. More emphasis is placed on advanced quality planning, education and training, improving processes, improving control over the process and involving and motivating people. Even when defects occur, they are identified early in the process. A proactive approach compared with the inspection-detection-based systems, which are reactive. There is a clear change of emphasis from downstream to upstream processes and from product/service to processes.	Relies heavily on inspection-detection-based corrective action, which results in inefficiency because of the tediousness and high costs of inspection and detection activity.
TOTAL QUALITY-BASED It is based on the belief that integrating all areas of an organization and involving everyone improves quality	It involves application of continuous quality improvement principles to all aspects of an organization including customers and suppliers and their integration with key organizational processes. It is an organization-wide approach to quality, with improvements undertaken on a continuous basis by everyone in the organization.	The need to develop a new operating philosophy and approach make implementation difficult. It requires a change in management style and way of thinking. It is difficult for various departments and functions to work and act together in cross-functional teams to discover the root cause of problems and to pursue their elimination.
WHAT NEXT? SUSTAINABILITY?	Broader Definition of Quality; Integrated 'cross-functional' models. Making Excellence a SMART objective. Sustainability Model	Difficult to management with education and training; Creation of a specialism may impact on level of participation.

It requires a broadening of outlook and skills, and an increase in creative activities from that required at the quality assurance level (Dale, 1999:9). The spread of the 'total' or 'strategic' quality philosophy was accompanied by greater sophistication in the application of 'tools and techniques', increased emphasis on people, process management, improved training and personal development and greater efforts to eliminate wastage and non-value adding activities (Dale, 1999:9). The process will also extend beyond the organisation to include partnerships with suppliers and customers and all stakeholders. Activities will be reoriented to focus on internal and external customers, with the aim of building partnerships and going beyond satisfying customers to delighting them (Dale, 1999:9). The successful implementation of 'total' or 'strategic' quality requires the mutual co-operation of everyone in an organisation and associated organisational processes to produce products and services, which meet and hopefully exceed the needs and expectations of customers (Dale, 1999:9). Total Quality Management (TQM)-based self-assessment methodology is one of many alternative approaches to managing quality successfully at the total quality stage on the evolutionary ladder. The question which remains unanswered is 'what is the next stage on the evolutionary ladder after total quality? Other alternative approaches including Benchmarking, Business Process Re-engineering and Balanced Scorecard are undoubtedly are more successful than others.

Lascelles and Dale (1993) provide empirical evidence, which concludes that, the extent to which organisations have adopted and committed themselves to TQM as the ethos of the business is indeed variable. Today many Quality Award Winners, such as Rank Xerox, BOC Ltd., Milliken, ICL, Texas Instruments and Hewlett Packard have successfully implemented total quality strategies to achieve organisational excellence (Dale, 1999, Oakland, 2003). Dale and Lightburn (1992) and later Dale (1999), also concluded that there is no *'steady state'* in the level of quality achieved, and that it is still possible for an organisation to slip from a higher total quality level of performance to a lower quality inspection level of performance. A never-ending effort is therefore, needed to sustain total quality – it is not a panacea. Even total quality strategies, which are successfully implemented, are not necessarily guaranteed to continue to bring long-term improvement. They may lose their impetus over time – a phenomenon described as *'quality disillusionment'* and *'quality drop'*

(Slack, 1991; Oakland, 1993). To reduce the risk of occurrence of this phenomenon, various researchers including Oakland (1993, 2003) and Slack et al. (1998) have suggested that 'quality' should be broadly defined.

There is little doubt that the alternative TQM-driven Excellence Models have helped to raise the profile of TQM in the USA, Europe and other parts of the world (de Raad, 1996; Dale, 1999; Evans and Lindsay, 1999). By the end of 1995, only a few public sector organisations have been short-listed or were finalists for an award or Prize, their number is increasing. This clearly suggests that TQM has reached a much higher degree of maturity in the private sector than in the public sector, with evidence of high performance and high business excellence among private sector organisations. This development have influenced recent UK government policies in empowering the QAA and HEFCE to tighten quality management procedures; and encouraging the higher education sector to look to TQM and TQM-driven Excellence models for performance improvement (McAdam and Welsh, 2000; DfES, 2003).

Many world-class organisations appear to be moving closer to an integrated 'cross-functional' quality management model superior to any individual approach which will take account of the requirements of each alternative approaches to total quality (Shield, 2000). The world of higher education will be forced to reckon with the global movement toward TQM with more HEIs drawn into the process of delivering quality improvement in all aspects of higher education institutional activities with a view to achieving their mission in the future. Self-assessment based on EFQM Excellence model is still TQM dressed up to please those who have and are still sceptical about the relevance of TQM to industry and commerce and in particular the higher education industry.

D. Comparative Evaluation of Alternative Quality Models

This sub-section evaluates 13 quality management models developed for implementation in HEIs, in order to identify their key weaknesses and strengthens (see Table 1.20 below). Eight of the models developed in the UK are listed below:

(1) South Bank TQM Model (Geddes, 1993);

(2) Aston TQM Model (Clayton, 1995);

(3) Birmingham TQM Model (Owlia, 1995);

Table 1.20
A Comparative Evaluation of Alternative Models for Teaching and Research Quality Management
Source: Osseo-Asare Jr. (2003)

YEAR	MODELS	Principles, Concepts, and Factors Linked to		
		INPUTS	PROCESSES	OUTPUTS
1989 USA Unique	**Fox Valley TQM Model**			
	Focus: Teaching and Learning **Source**: Spanbauer (1989)	Human Resources; Measurement Strategy; Technology; Curriculum.	Quality Planning and Costing Processes; Measurement Processes; Benchmarking Processes.	Customer Satisfaction; Staff Satisfaction.
1991 USA Unique	**Integrative TQM Implementation Model**			
	Focus: Teaching and Learning **Source**: McGee (1991)	Management Commitment and Support; Employee Involvement and Development; Policy and Strategy; Organisational Structure for Quality; Quality Team	Planning Process; Continuous Improvement Process; Implementation Process; Benchmarking Best Practice Benchmarking Process	Customer Satisfaction; Staff Rewards and Recognition; Staff Satisfaction
1993 USA Unique	**TQM Implementation Model**			
	Focus: Teaching and Learning **Source**: Coate (1993:303-320)	Top Leadership; Mission and Vision; Policy and Strategy; Management Structure	Strategic Quality Planning Processes; Top-Down Communication Process;	Customer Satisfaction; Staff Rewards and Recognition; Staff Satisfaction
1993 UK Unique	**South Bank TQM Model**			
	Focus: Teaching and Learning **Source**: Geddes (1993:341-361)	Structure: directorate, deans, heads and staff	Internal and External Customer-Supplier Relationship Management Processes	Students as External Customers; Staff as Internal Customers; Internal and external customer satisfaction
1995 UK Unique	**Aston TQM Model**			
	Focus: Teaching and Learning; Research; Support-services. **Source**: Clayton (1995)	Hierarchical Structure; Top Leadership and Management; Mission, Objectives	Continuous Improvement Process; Teaching and Learning Processes; Research Processes; Support Processes	Customer Results; Research Outcomes
1995 UK Unique	**Birmingham TQM Model**			
	Focus: Teaching and Learning Research and Scholarship **Source**: Owlia (1995)	Staff Competences; Staff Attitudes; Contents; Hierarchical Structure; Improvement Policies and Strategies	Delivery Processes; Performance Management Processes; Teaching and Learning Processes; Research Processes; Statistical Process Control Processes	Students Satisfaction; Staff Satisfaction; Employer Satisfaction
1996 UK Unique	**Leicester TQM Excellence Model**			
	Focus: Teaching and Learning **Source:** Ho and Weam (1996)	Structure, Standards; Self- Discipline and Responsibilities	Students' Learning Processes; Teaching and Learning Quality Control Processes; Systems;	Student Satisfaction; Students Results; Learning Outcomes
1996 UK Generic	**QAA Teaching Excellence Model**			
	Focus: Teaching and Learning **Source:** QAA (2002)	Funding for Teaching Infrastructure; Student Learning Support; Academic Standards;	Teaching and Learning Processes; Peer Review Process; Internal Review Process; External Audit Processes; Subject Review Processes; Institutional Review Processes; Continuation Audit Processes; Internal Quality Assurance Systems	External Stakeholder Satisfaction; Valid, Reliable and up-to-date Public Information about the Quality of Provision and Standards of Awards; Teaching Quality Assessment Scores

Table 1.20
Continuation
Source: Osseo-Asare Jr. (2003)

YEAR	MODELS	Principles, Concepts, and Factors Linked to		
		INPUTS	PROCESSES	OUTPUTS
1996 UK Generic	**HEFCE Research Excellence Model**			
	Focus: Research and Scholarship **Source:** HEFCE (2003)	Research Leadership; Research Grants and Contracts; Researchers; Research Infrastructure	Collaboration and Partnership Processes; Research Processes; Peer Review Processes;	RAE Score; National and International Excellence; Knowledge Transfers; Regional Regeneration
1996 USA Generic	**MBNQA Educational Excellence Model**			
	Focus: Generic Activities **Source:** MBNQA (2002)	Leadership; Management; Policy and Strategy; Information; Human Resources	Strategic Planning Processes; Marketing Research Processes; Process of Information Analysis; Process Management	Business Results; Customer Satisfaction
1999 Europe Generic	**EFQM Excellence Model**			
	Focus: Generic Activities **Source:** EFQM (2002)	Leadership; Policy and Strategy; Partnership and Resources; People Management	Processes; RADAR Measurement Process	Customer Results; People Results; Society Results; Key Performance Results
1999 Europe Generic	**EQUIS Model**			
	Focus: Teaching and Research **Source:** EQUIS (2002)	Mission; Strategy; Continuous Improvement Culture; Staff Development; Resources;	Accreditation Process; Internal and External Assessment Processes; Management Processes; Benchmarking Processes; Strategic Audit Processes	External Stakeholders Satisfaction
1999 UK Generic	**Kanji's Business Excellence Model**			
	Focus: Generic Activities **Source:** Kanji and Tambi (2002)	Leadership; Management by Fact; People-based Management; Improvement Culture	Improvement Processes; Continuous Improvement Processes	People Performance Results; Customer Results; Business Performance Results; Customer Delight

(4) Leicester TQM Excellence Model (Ho and Wearn, 1996);

(5) QAA Teaching Excellence Model (QAA, 2002);

(6) HEFCE Research Excellence Model (HEFCE, 2003);

(7) UK/EFQM Excellence Model;

(8) Kanji's Business Excellence Model (Kanji and Tambi, 2002).

The QAA and HEFCE Models are well known, understood, and have been successfully implemented in UK higher education institutions (HEIs). The UK and EFQM Excellence Model is now being piloted in few UK higher education institutions at the micro-level i.e. departmental level. The first four models were developed specifically for individual HEI; and the last four are generic models developed for implementation in all institutions. The analysis of all the 13 quality management models in Table 1.20 - from a 'systems' perspective - reveals the following:

- *UK higher education institutions lag behind their counterparts in the USA, in their attempt at developing and implementing appropriate models for managing the quality of teaching and research;*

- *Contextual issues are critical to useful implementation of any model for quality management in higher education because of the complex nature of operations in a higher education environment;*

- *Most of the models are based on top-down management and leadership approaches, and are more focused on strategic concerns than operational issues;*

- *All the models are based on systems thinking, and therefore reveal principles, concepts and factors relating to 'inputs', 'processes', and 'outputs'; and evidence of feedback mechanisms. Key inputs, processes and outputs include, managerial leadership; teaching and research processes; and teaching and research outcomes;*

- *The link between TQM Models and Excellence Models, is established through common concepts, and principles;*

- *Teaching quality assessment is split from Research quality assessment, evidence by a separate model for teaching and for research developed by the QAA and HEFCE.*

Alternative Models to QAA's Model for Teaching Quality Management

The Mission of the Quality Assurance Agency (QAA) in the UK is to promote external stakeholder confidence that the quality of teaching and learning and the standards of awards are being safeguarded and enhanced. The Agency attempts to achieve this, by carrying out external audit of the academic performance (QAA, 2002a:1). The Agency's 'new' Institutional Review model replaces previous two processes: 'Continuation Audit'; and 'Subject Review' undertaken by the QAA on behalf of the HEFCE. The Agency recognized that HEI themselves are best placed to provide stakeholders with valid, reliable and up-to-date information about the quality of provision, of their programmes and the standards of their Awards (QAA, 2002a:1). The methodology is based on collecting empirical evidence of data, information and judgements about quality and standards at the point of delivery, through a Peer Review Process (QAA, 2002a:1). Individual higher education institutions are expected to maintain and publish a range of up-to-date information on quality and standards, and to undertake their own internal reviews or 'self-assessment' in the context of their strategies for teaching and learning (QAA, 2002a:1-2; HEFCE, 2002:15).

A critical look at seven quality management models in the UK identifies their key strengths and weaknesses relative to the QAA Model, and the MBNQA Educational Excellence Model introduced in 1999 (see Table 1.21, below). The major strength of the QAA Teaching Excellence Model - now under the framework for 'Institutional Review' - is that, it focuses on 'core processes' for delivering improvements in the quality of teaching and learning. The however, has two major weaknesses; firstly, that it does not provide a direct assessment of leadership and management performance; and secondly, teaching function is not integrated with research function, which is also a core academic activities, as a result academic excellence cannot be said to have been fully achieved. Quality Models by Ho and Wearn's (1996); EFQM, MBNQA, and Kanji's Business Excellence Models may be considered superior to the QAA model in that, they directly assess 'leadership' and 'management' performance as 'inputs' into a framework of core 'processes'. The fact that these models have not been widely adopted by individual HEIs in the UK is partly because they have a contextual application, and there is doubt about their transferability across institutions (Holloway, 1994; Kanji and Tambi, 2002:26).

Table 1.21
Strengths and Weaknesses of UK Models for Teaching and Research Quality Management in Higher Education
Source: Based on the works of QAA (2002a), Kanji and Tambi (2002)

		KEY STRENGTHS	KEY WEAKNESSES
1	QAA Teaching Excellence Model	Focus on Assessment of the Quality of Teaching and Learning PROCESSES; and OUTCOMES. More concerned about OPERATIONAL QUALITY i.e. micro-level quality management. Successfully integrates Teaching and Learning Processes	Using the Quality of Processes and of Outputs, to indirectly assess the Quality of INPUTS into Teaching and Learning Processes. Less concerned about STRATEGIC QUALITY in particular Top Management and Leadership involvement in Quality at all levels The Model is not directly concerned about the Quality of Research, which is also a key Academic Function. In that sense it is less HOLISTIC and less INTEGRATED
2	HEFCE Research Excellence Model	Focus on Assessment of the Quality of Research PROCESSES; and OUTCOMES. More concerned about OPERATIONAL QUALITY i.e. micro-level quality management. Successfully integrates Research and Scholarship functions or processes	Using the Quality of Processes and of Outputs, to indirectly assess the Quality of INPUTS into Research Processes. Less concerned about STRATEGIC QUALITY in particular Top Management and Leadership involvement in the Quality of Research and Scholarship at all levels The Model is not directly concerned about the Quality of Teaching and Learning, which is also a key Academic Function. In that sense it is less HOLISTIC and less INTEGRATED
3	Birmingham TQM Model	Focus on Integrated Assessment of the Quality of Teaching and Research at the micro-level i.e. Engineering Department, University of Birmingham Better integration of INPUTS, PROCESSES and OUTPUTS compared to the QAA Model	A mathematical model which places too much emphasis on measurable or tangible factors at the operating level. It is not a generic model like the QAA Model
4	Leicester TQM Excellence Model	Focus on Integrated Assessment of the Quality of Teaching and Learning at the micro and macro-level i.e. at strategic and operational levels Better integration of INPUTS, PROCESSES and OUTPUTS compared to the QAA Model, and the Birmingham TQM Model	It is not a mathematical model as in the case of the Birmingham Model, but what might best be described as a model based on qualitative empirical data, with emphasis on both tangible and intangible measures of service quality. It is not a generic model like the QAA Model, but has a wider applicability than the Birmingham Model because it incorporates a wide range of TQM Tools and Techniques relating to Service Quality.

Table 1.21
Continuation
Source: Based on the works of QAA (2002a), Kanji and Tambi (2002)

5	South Bank TQM Model	Focus on Integrated Assessment of the Quality of Operational activities at the micro and macro-level i.e. at strategic and operational levels Integrates INPUTS, PROCESSES and OUTPUTS in order to articulate internal and external customer-supplier relationship	It is not a mathematical model as in the case of the Birmingham TQM Model, but a model based on qualitative empirical data on a host of customer-supplier relationships at micro and macro level of the institution.
6	Aston TQM Model	Focus on Integrated Assessment of the Quality of Teaching and Learning, and Support-services at the micro and macro-level i.e. at strategic and operational levels Better use of critical success factors to integrate INPUTS, PROCESSES and OUTPUTS compared to the QAA Model, and the Birmingham TQM Model	It is not a mathematical model as in the case of the Birmingham TQM Model. It is not a generic model like the QAA Model and the HEFCE Model, and focuses less on Research Quality.
7	UK/EFQM Excellence Model	Focus on Integrated Assessment of the Quality of Academic and Non-academic activities primarily at the macro-level i.e. at strategic Better integration of INPUTS, PROCESSES and OUTPUTS compared to the QAA Model, and the Birmingham TQM Model	It is not a mathematical model as in the case of the Birmingham Model, and Kanji's Business Excellence Model. The link between Strategic and Operational issues is not well described. It is a generic model like the QAA Model, yet to be verified by empirical evidence from UK higher education Institutions.
8	Kanji's Business Excellence Model	Focus on Integrated Assessment of the Quality of Academic and Non-academic activities, primarily at the macro-level i.e. at strategic Uses an 'Index' to integrate INPUTS, PROCESSES and OUTPUTS	It overemphasises the use of quantitative data at the expense of qualitative data, which might be more relevant to make judgements on quality in higher education. It is a generic model like the QAA Model, not yet fully adopted by UK higher education.
9	MBNQA Education Excellence Model	Focus on Integrated Assessment of the Quality of Academic and Non-academic activities, primarily at the macro-level i.e. at strategic Better integration of INPUTS, PROCESSES and OUTPUTS	It is not a mathematical model as in the case of the Birmingham Model, and Kanji's Business Excellence Model, but is based on best practices in higher education.

The Quality Assurance Agency's (QAA) external audit process is intended to combine scrutiny of internal quality systems at the institutional level with investigations of how those systems operate at the departmental level (QAA, 2002a:1). The primary objective of the government in introducing 'institutional review' is to use it as a means of securing accountability for the use of public funds received by institutions. The secondary objectives relating to quality are summarized below:

- *To contribute, in conjunction with other mechanisms, to the promotion and enhancement of high quality in teaching and learning;*
- *To ensure that students, employers and others can have ready access to easily understood and reliable public information about the extent to which institutions are individually offering programmes of study, awards and qualifications that meet general national expectations in respect to academic quality and standards;*
- *To ensure that if the quality of programmes are found to be seriously deficient, the process forms a basis for ensuring rapid action to improve them (QAA, 2002a:2).*

Alternative Models to HEFCE's Model for Research Quality Management

In most UK HEIs, internal assessment of research quality is driven by external assessment of research quality by the HEFCE, and other professional bodies. The HEFCE periodically assesses research quality using its Research Assessment Exercises (RAEs) model with the objective of obtaining 'value from public investment' and 'quality improvement' (HEFCE, 1994a:7). This model like the QAA Teaching Excellence Model focuses on 'core processes'; these processes however relate to research activities and not to teaching, indicating that a separation between research and teaching activities. The TQM and Excellence Models shown earlier in Table 1.21, focus on both teaching and research activities, although many of them do not describe their exact methodology for assessing the quality of teaching and/or research at operational and strategic levels of the institution. Apart from the QAA and HEFCE models, the remaining models appear to be based on an assumption that teaching and research theory and practice are well known and need not be explained. For instance, Kanji's Excellence Model may be described as representing a positivist approach to assessing the quality of teaching and research at both strategic and operational levels. However, the operational details which are required to make the model easy to understand and to implement is clouded in 'excellent' statistical details,

rather than a comprehensive descriptive account of best practices at all levels of the institution. Core public funding for research is provided through the 'dual support system' – one stream via the HEFCE to support the underpinning research capability of institutions, which is distributed selectively according to the quality of research. The other stream flows via the research councils and the Arts and Humanities Research Board to support specific research projects (DfES, 2003:24). This extra money is to ensure that research projects are fully funded, so that HEIs do not have to cross-subsidise research from teaching, or scrimp on investment in infrastructure. It is also to ensure that the current poor state of the research infrastructure can be brought up to standard – because in many subjects good research increasingly depends on high-quality facilities and equipment (DfES, 2003:25). Accountability is the primary motivation with quality improvement as the major objective (HEFCE, 1997b:6).

The increase in resources for research requires HEIs to demonstrate that they are operating sustainable research businesses through recovering the full economic costs of research (DfES, 2003:25-26). The challenge for HEIs is how to make the best use of the money by making sure that research funding is managed efficiently. Recurrent funding for research is already distributed selectively, based on the outcome of the Research Assessment Exercise (RAE), which judges the Quality of Research in departments (DfES, 2003:25-26). The selectivity of research funding is illustrated by looking at RAE ratings, which mean that about 75% of HEFCE research funding goes to the top 25 institutions, and research council grant funding follows a similar pattern. This means that some institutions have a high concentration of top quality research. But at the same time there is also a wide spread of individual departments in other institutions undertaking high quality research – beyond the top 25, a further 52 institutions have at least one department rated 5 or 5* in the 2001 RAE, and departments rated 4 are yet more widespread. The critical issues arising from this situation are:

- *Rewarding research intensive institutions adequately, and protecting relatively isolated pockets of high-quality research in institutions which are not themselves research intensive;*
- *Encouraging and developing emerging areas of research;*
- *Steering non-research-intensive institutions towards other parts of their mission, and rewarding them properly for it, so that the RAE can be focused on the best research (DfES, 2003:26).*

1.2.3. Establishing the Functional Relationship Between 'Efficiency' and 'Effectiveness'

Professor John L. Mullins in his book titled *Management and Organisational Behaviour* defined the term 'efficiency' in terms of managers' 'doing things right', and the term 'effectiveness' in terms of managers' 'doing the right things' (Mullins, 1999:233; 2003). He argued that a manager's ability to 'do things right' is related to his or her ability to 'do the right things'. This requires managers to *efficiently* allocate the scarce input resources available to them in order to *effectively* achieve predetermined performance improvement results. This seems to suggest that 'doing things right' i.e. efficiency and 'doing the right things' i.e. effectiveness, are closely associated. It supports the view that, a cyclical relationship exists between 'efficiency' and 'effectiveness' in much the same way as 'management' and 'leadership. Mullins (2003) us of the notion 'managerial leadership' confirms the existence of a functional 'cyclical' relationship. The works of Clark (1998:143) and Knight and Trowler (2001:3) suggest that *leadership or effectiveness* focuses on 'change' (in relation to achieving superior performance results), and *management or efficiency* focuses on how to plan, implement, and control 'change' (in relation to resource availability, allocation and utilisation).

The works of Mullins (2003) on 'management practices', and Bennis and Nannus (1985) on 'leadership practices' suggest that the association between management 'efficiency' and leadership 'effectiveness' is based on the assumption that the later represents 'input resources', 'means', or 'enablers' and the former represents 'outcomes or output', 'ends', or 'results'. Advocates of strategic quality management of TQM and Organisational Excellence Models, take this assumption further, by suggesting that, the well established deterministic 'cause-and-effect' relationship between 'inputs or resources' and 'outputs or results', confirms that the 'efficiency-effectiveness' relationship is similar to a 'cause-and-effect' relationship. This assumption underpins the structural basis for the EFQM Excellence Model, the MBNQA, and Kanji Business Excellence Models. It also underpins the RADAR principle, which represents an approach to quality and performance improvement driven by 'results' i.e. the 'R' in RADAR, where R = Results, A = Approach, D = Deployment, A = Assessment, and R = Review (British Quality Foundation, 2000; EFQM, 2003a). In

brief, 'efficiency' and 'effectiveness' are about managers in leadership position 'doing the right things right first time'.

Blazey (1997) in his book titled *Insights to Performance Excellence* used the 'causal relationship' between 'efficiency' and 'effectiveness' to develop an audit tool for evaluating the customer complaints management systems of organisations. Zairi (2000a:331-335) developed Blazey's (1997) audit tool into an elaborate methodology for evaluating best practices for improving customer complaints management systems. Both Blazey (1997) and Zairi (2000a) measured 'efficiency' in terms of the 'degree of importance' of a management practice, along with the 'degree of effectiveness' of the practice. A modified version of Blazey's (1997) audit tool and Zairi's (2000a) best practice evaluation tool is used in this doctoral research study to measure 'gaps' in respondents' 'perception' of quality management practices in their respective higher education institutions. This involved the use of 'Likert scales' and a system of scoring responses in the design of Questionnaires as explained in detail later in Chapter Two under research methodology.

1.2.4. Doctoral Research Gap and Research Objectives

The key empirical research work from which the 'broad' doctoral research 'gap' or 'problem' is identified was that of Srikanthan and Dalrymple (2001:566-572) who suggested there is considerable urgency for the development of an appropriate model for quality in higher education. Their work is collaborated by Osseo-Asare and Longbottom (2001, 2002) who questioned the suitability of the EFQM Excellence Model in UK higher education (see article under Appendix D2). The 'broad' research gap emanating from these empirical research studied is defined as:

The absence or lack of an holistic and integrated model that is appropriate for sustaining continuous quality improvement in UK HEIs. Associated with this gap is the lack of the higher education version of the EFQM Excellence Model. This has made it difficult for individual HEIs to sustain Teaching and Research Quality Improvement levels over a long-term period and to do so on a continuous basis.

The key words or concepts in the above definition include 'holistic', 'continuous quality improvement', and 'model' - these are defined in the Glossary on page 523. The broad research gap is analyzed in depth by examination of its component parts under Table 2.3 on page 117 by reference to existing literature. Appendix 1 on page 421 provides a detail description of the nature of the research problems associated

with the broad research gap. Underpinning this 'broad' research gap or problem is the broad research question relating to the identity of critical success factors (CSFs) or criteria for deciding the appropriateness of a quality management model in UK HEIs. In order to answer this question a set of research objectives is required, which are linked together in a hierarchical manner. For the purpose of this research study this set of objectives comprises of 'four' objectives categorised into 'primary' and 'secondary'.

The Primary Objective is:

"To develop a generic, holistic, integrated, and prospective model for sustaining quality in UK higher education institutions"

The Secondary Objectives are:

- *To identify critical success factors (CSFs) from the internal, external and competitive environment in which UK HEIs operate;*
- *To describe the Best Practices linked to each critical success factor (CSF);*
- *To explain the association between the critical success factors and Best Practices as basis for creating a theory and model for quality management in UK HEIs.*

There is a hierarchical relationship between the three 'secondary' research objectives, which eventually links up with the 'primary' research objective. The Exploratory Phase of the Field Research Survey was aimed at achieving the 'first' of the 'three' secondary objectives using a Questionnaire. This was followed by a Conclusive Phase, which used Semi-structured Interviews to collect empirical data on best practices linked to the critical success factors (CSFs) identified earlier at the exploratory research phase - the aim was two-fold.

- *First, to give a 'descriptive account' of best practices in academic and non-academic quality management areas - in order to achieve the 'second' secondary objective.*
- *Second, to explain any association between CSFs and Best Practices as basis for creating an inductive theory and a model for quality management - in order to achieve the 'third' secondary objective, and by implication the primary research objective.*

1.2.5. Structure of the Doctoral Thesis

The doctoral research thesis is divided into six chapters as follows:

Chapter One:
Introduction and Critique of Existing Literature *- approximately 32,000 words*

1.1. Strategic Reasons for Researching Quality in Higher Education at the Doctoral Level

1.2. Review of the Environmental Factors Driving Demand for Higher Quality in UK HE

Chapter Two:
Critique of Existing Empirical Research Design and Methods *- approximately 15,000 words*

2.1. Critical Evaluation of Alternative Research Philosophy, Approach, Strategy and Methods

2.2. Using the Gaps in the Literature and Expert Opinion to Design Research Instruments

Chapter Three:
Presentation and Analysis of Primary Data *- approximately 10,000 words*

3.1. Presentation of Qualitative and Quantitative Primary and Secondary Data

3.2. Analysis of Quantitative and Qualitative Primary and Secondary Data

Chapter Four:
Discussion of Empirical Research Results *- approximately 16,000 words*

4.1. An Evaluation of the Empirical Results by Reference to Strategic Management Principles

4.2. Creation of Polls of Critical Success Factors and Best Practices

Chapter Five:
Interpretations of Empirical Research Findings *- approximately 13,000 words*

5.1. Creation of an Inductive Theory for Sustaining Academic Quality Improvement in the UK

5.2. Development of a Model from the Inductive Theory for Quality Improvement

Chapter Six:
Conclusions and Recommendations *- approximately 12,000*

6.1. Highlighting the Doctoral Research Thesis' Major Contribution to Knowledge

6.2. Recommendations and Areas for Further Research

References:

Bibliographical Notes:

Appendices:

Publications and Papers:

1.2.6. Summary of Chapter One and Link with Chapter Two

Chapter One provided an introduction to the doctoral research thesis by firstly, reviewing the strategic reasons for conducting research into quality in higher education at the doctoral level. The overall view from the summary of main reasons

outlined on page 14 suggests that, central to UK Government's commitment to modernisation of the system of higher education through cost-effectiveness, is the use of 'quality assessment' regimes as a basis for deciding funding allocations. It is therefore imperative for individual HEIs to deal with the controversy and conflict surrounding the meaning and relevance of 'academic quality' in order to formulate quality and performance improvement policies and strategies which are sustainable. This provides a justification for further research at all levels in particular the doctoral level to provide more insight into how best to sustain higher quality in an environment of scarce financial and non-financial resources. Secondly, Chapter One gave a critical commentary of existing literature resulting in the identification of many diverse internal, external, and competitive critical success factors (CSFs) driving demand for higher quality in UK HEIs. Table 1.22, below provides a checklist of some of the most significant *internal*, *external* and *competitive* critical success factors (CSFs) in the UK higher education environment.

Table 1.22
Checklist of the Most Significant Critical Success Factors in UK Higher Education Environment
Source: Based on Literature Review

No.	Internal, External, and Competitive CSFs
1	UK Government Selective Funding Allocation Policy and Strategy
2	Changes in Quality Assessment Methodology by the QAA and HEFCE
3	Increasing Demand for Cost-effectiveness coupled with steady decline in Funding per Unit
4	Increase in Participating Rate and Social Responsibility
5	Investment in ICT Infrastructure and Systems of Internal and External Reporting
6	Threat of New Entrants into the University Sector by General Colleges and Specialist Institutions
7	Increasing demand for differentiation
8	Increasing demand for Student satisfaction and delight
9	Funding gaps in Staff Recruitment and retention Budgets
10	Leadership, policy, strategy for quality improvement
11	Effective Process Management for Quality
12	Systems Approach to Teaching and Research Quality Management

By reviewing trends in critical success factors (CSFs), Chapter One exposed the contradictions and elements within quality management practices in UK HEIs, thereby setting the stage for deciding the research design, methods and instruments for primary data collection in Chapter Two. Three significant contradictions were exposed. The first, relates to he controversy and conflict over the extent to which quality in higher education should be seen as a convergence of diverse stakeholder perceptions, in order to provide a base for developing a 'composite' definition of academic quality. The second, relates to the evolution of approaches to quality from 'inspection-based' to 'prevention-based', exposing the fact that most organisations

including HEIs are still 'reactive' rather than 'proactive' in their approach to quality management, evident by the high cost of inspection activities. The third is related to the fact that, in practice the choice of internal quality assessment methodology frequently involves changing the balance of power and value systems. This has made it even more difficult to integrate internal and external requirements for accountability. These three contradictions underpin the six main reasons for researching quality at the doctoral level outlined on page 14. The observed trends and the nature of the impact of internal, external and competitive CSFs on quality management practices have led to identification of the following inherent weaknesses in some of the alternative models for academic quality management:

- *QAA and HEFCE Models are less holistic and do not enthusiastically embrace an integrated approach to academic quality management;*
- *TQM Models are not well understood and are difficult to implement in higher education;*
- *Excellence Models do not adequately reflect the context of teaching, learning, research and scholarship.*

These 'weaknesses' underpin the urgency for the development of an *appropriate* model for sustaining academic quality improvement in UK higher education institutions.

Chapter One also established the functional relationship between 'efficiency' and 'effectiveness' as this underpins the measurement of 'gaps' in respondents' perception of quality in individual higher education institutions. Finally, Chapter One stated the primary and secondary research objectives, and provided an outline of the structure of the doctoral research thesis as comprising of six chapters. Chapter Two matches the research questions with alternative research philosophies, approaches, strategies, methods and instruments in order to select the most appropriate and cost-effective for achieving the primary and secondary doctoral research objectives.

chapter|two

CRITIQUE OF EXISTING RESEARCH DESIGN AND METHODS

Chapter Two critiques existing literature on alternative Research Methodologies to help select the most appropriate research philosophy, approach, and strategy; research methods; and research instruments to enable primary data to be collected and analysed concurrently. Chapter Two, comprises of two sections: Section [2.1], provides a critical evaluation of alternative research philosophies, approaches, strategies, and methods; Section [2.2], uses the gaps in the literature and expert opinion to design broad and specific research questions for the Questionnaire and Semi-structured Research Interview Plan. The overall aim is to provide a justification for using a particular research design, methods, and instruments, for Primary Data Collection, Presentation, and Analysis.

"...it is unwise to conduct research without an awareness of the philosophical and political issues that lie in the background" (Easterby-Smith et al., 2002:3)

2.1

Critical Evaluation of Alternative Research Philosophies, Approaches, Strategies and Methods

" The decision to study a topic in a particular way always involves some kind of philosophical choice about what is important."(Easterby-Smith et al., 2002:3)

This first section of Chapter Two provides a critical evaluation of alternative empirical research methodologies as basis for selecting the most appropriate research 'philosophy', 'approach', 'strategy', 'methods', and 'instruments', for this research study. It sets the stage for using the 'gaps' in the literature and expert opinion to design appropriate questions for the Questionnaires and Semi-structured Interviews as in Section [2.2]. Before turning our attention to the main purpose of this chapter, the sub-sections below, review the meaning of management 'research' and 'methodology' at the doctoral level; and the linear and non-linear 'models' of a doctoral research process – in the context of higher education.

The Meaning of 'Management Research' at the Doctoral Level

Existing literature suggest there are two extreme views about the meaning of 'management' and 'research'. First, 'scientific management theorists' such as Taylor (1947), Fayol (1950), Gordon and Howell (1959), see 'management' as a set of functional activities carried out by managers, and comprising of planning, implementing and controlling. Second, the 'human-relation management theorists' such as Mintzberg (1973), see 'management' in terms of 'inter-relationships' in a work environment. These two extreme views of management have serious implications for the 'research process' as a whole and more specifically the 'choice of research design and methods'. On 'research process', scientific theorists encourage a step-by-step approach to research, underpinned by planning, implementation and control; whereas, human relation theorists prefer an interactive and iterative non-linear approach. On 'choice of research design and methods', scientific management

researchers are interested in 'observational research methodologies' that provide a structured description of managerial activities and roles within case organisations. Whereas, human-relation researchers are more interested in 'communicational research methodologies' for gathering stories, narratives and conversations about what managers actually do at work (Churchill, 1999:281-283; Easterby-Smith et al., 2002:6-7).

Management practices according to Transfield and Starkey (1998) and Easterby-Smith et al. (2002:8) are largely eclectic, in the sense that, managers need to be able to work across technical, cultural and functional boundaries; they need to be able to draw on knowledge developed by other disciplines. This poses two problems for this researcher; first, is whether to research into quality management from the perspective of one discipline, or multiple disciplines. This thesis may be described as a multidisciplinary research, in the sense that, it aims to produce results that are of use to practicing managers. Second, is how to resolve the problem of access into individual higher education institutions, and to deal with issues of confidentiality and publication rights (Saunders et al., 2003) - a formal request for access and respect for individual confidentiality was adopted in this research study.

Research into management practices at the doctoral level may be broadly defined as:

"A systematic, careful inquiry or examination, to discover new information or relationships and to expand or verify existing knowledge for some specific purpose" (Jankowicz, 1995)

Jankowicz's definition may be related to the two extreme types of management research i.e. 'pure' research and 'applied' research identified by Easterby-Smith et al. (20002:8-12). From the assumed research outcomes in Table 2.1, below, we can see that this doctoral research study may be described as 'pure research' with 'reflection' as the intended outcome.

Table 2.1
Types and Level of Management Research and their Outcomes
Source: Based on the work of Easterby-Smith et al. (2002:8-12)

	TYPES & LEVEL OF STUDY	ASSUMED OUTCOMES
1	**Pure Research** Doctoral Research Study	Many Outcomes: Theory Development – Discovery, Invention, Reflection
		Practical Implications: There may, or may not be any practical use of results
		Research Audience: Mainly Academics
2	**Applied Research** Masters Research Study	Main Outcomes: Theory Testing – Practical Applications
		Practical Implications: Solving Specific Practical Problems
		Research Audience: Mainly Practitioners

According to Easterby-Smith et al. (2002:9) 'reflection' involves re-examination of existing group of management ideas, a technique, or theory in a different organisational or social context. For example, this thesis among other things re-examined the extent to quality management theories underpinning TQM and EFQM Excellence Model frameworks - which have been successfully implemented in private sector organisations - could be successfully applied in UK HEIs. Results from this 'comparative study' have led to revision and modification of TQM and EFQM Model frameworks in the context of UK higher education. Even though this type of pure research outcome is less spectacular than 'discovery' or 'invention', it is very widely used in doctoral theses (Easterby-Smith et al., 2002:9).

Research Methodology Defined

Jankowicz (1995) defined research methodology as:

"The analysis of, and rationale for, the particular method or methods used in a given study, and in that type of study in general" (Jankowicz, 1995)

This definition places emphasis on two aspects of methodology. First, the aspect relating to research 'design', which requires the researcher to explain the rationale for wanting to use a particular research method. Second, the aspect relating to research 'methods' and 'instruments', which requires an analysis or evaluation of alternative methods and instruments, for primary data collection, presentation, and analysis, in order to select the most appropriate for a given study. As both resource limitations and time constraints were major considerations in this doctoral study, the choice of design, methods and instruments, were thought to be the most suited, for achieving the research objectives in a timely, cost-effective, and organised manner.

Linear and Non-linear Models of a Management Research Process

Although each doctoral research problem or opportunity imposes its own special requirements, the writings of Churchill (1999) and Saunders et al. (2003), suggest that, this research study can be productively viewed as a linear sequence of steps i.e. a process that includes:

(1) Formulating the Research Problem and Stating Research Objectives;

(2) Determining the Research Design in terms of philosophy, approach, and strategy;

(3) Determining Research Methods and Instruments for Primary Data Collection;

(4) Primary Data Presentation and Analysis;

(5) Discussion of Empirical Results and Interpretation of Empirical Findings;

(6) Conclusions and Recommendations

Like many social researchers including Burgess (1984), this researcher sees the doctoral research process not simply as a 'neat linear procedure' as required by scientific theorists, but also as a 'social process', involving complex interactive and iterative relationships between the researcher and the researched as suggested by human relation theorists. The systematic approach provided by the linear model was used as the thought process for thinking through research design before deciding on the appropriate research methods and instruments. It provided the thesis with a logical, well-structured layout. The complex social inter-relationships between the various stages of the linear research process place emphasis on the ontological and epistemological underpinnings of the doctoral research methodology (Burgess, 1984:31; Churchill, 2000:67).

2.1.1. The Philosophical and Empirical Underpinnings of Research Design

In this doctoral research study, the philosophical and empirical underpinnings of 'research design' and 'research methods' are critically examined under separate headings and not as a single issue. The primary reason for doing so is to provide a clear definition for each, and to establish the linkage between, research 'philosophy', 'approach', 'strategy', 'methods' and 'instruments'. Research design can therefore be defined as the structure or plan of investigation, inquiry or examination, which helps to obtain data, information or answers in response to broad and specific research questions linked to primary and secondary research objectives. It constitutes the blueprint or plan for primary data collection, measurement and analysis (Hussey and Hussey, 2000). A research design process therefore consists of three decision-points: first, deciding the possible 'philosophical' position, second, deciding the research 'approach' and third, deciding the research 'strategies', which underlie research methods and instruments (Remenyi et al., 2002; Cohen et al., 2003; and Saunders et al., 2003). In brief, this doctoral research design process involved deciding on the appropriate 'philosophical orientation', 'research approach' and 'research strategy'.

Research Objectives and Research Philosophy

At one extreme is 'positivism', which has its roots in the 'scientific methods' of natural sciences. To positivists, the world exists externally and objectively. Research

should therefore, be value-free, focus on facts, and data should be quantifiable. This enables a theory or hypothesis to be tested and subsequently validated (Saunders et al., 2003). On the other extreme, 'phenomenology' has its roots in a 'social' view of the world, which sees observations as only validated by meanings, understanding, opinions and feelings of people. Thus facts are not objective, and they are only useful in the context of the various interactions, which are the subject of the research. Data will thus be largely qualitative, and possibly difficult to verify, and generalisations are very speculative. Results will therefore not be value-free, and may only be relevant for a particular set of circumstances, at a particular moment in time (Saunders et al., 2003; Hussey and Hussey, 2000).

Some researchers use mixed methodologies in an attempt to achieve a balance, as opposed to using either positivist methodologies or phenomenological methodologies singularly. It encourages the use of a combination of philosophies, approaches, strategies, quantitative and qualitative methods of research, thus facilitating the process of 'Triangulation' (Easterby-Smith et al, 2003). Triangulation of methodologies is used in this research thesis to assist in:

- *Confirming data/information from different sources (Rossman and Wilson, 1991);*
- *Encouraging the analysis of similarities or irregularities that are disclosed or revealed in order to establish various views of management and other stakeholders expectations (Saunders et al., 2003), with regard to quality management practices in higher education institutions.*

The philosophical orientation of a 'critical realist' and that of a 'pragmatist' are positioned between the two extreme philosophical positions (Tashakkori and Teddlie, 1998; Miles and Huberman, 1994). This 'middle' ground is also taken by the philosophy of 'coherenticism' as espoused by Professors Collin Evers and Gabriel Lakomski on higher education management research methodology (Evers and Lakomski, 1991, 2001).

The linkages between the research objectives and research instruments have been established using the thought processes of both a 'critical realist' and of a 'pragmatist'. Application of these thought processes means adopting a 'critical perspective' in order to 'dig' beneath the surface of 'quality management' phenomena in UK HEIs. The aim is to 'discover' the details of the current situation and to

'understand' and 'explain' the reality working behind them (Harvey, 1990; Remenyi et al., 1998:35; 2003).

Research Objectives and Research Approach

A purely 'positivist' theory testing process of research, which is 'deductive' and 'nomothetic', and quantitative in nature, will not be utilised in this study, since this researcher has not developed any particular theory or hypothesis prior to commencing research (Saunders et al. 2003). This researcher's assumption about the way in which the defined doctoral research problem would be fundamentally approached was based mainly on the philosophy of theory building i.e. 'phenomenological paradigm'. The focus is on meaning not facts, and it is 'inductive' not 'deductive', it is 'ideographic' not 'nomothethic' and qualitative in nature (Hussey and Hussey, 2000; Saunders et al., 2003). It is about how quality management in publicly funded HEIs, think and feel about quality management practices on their campuses.

Research Objectives and Research Strategy

This research study is 'cross-sectional' and aimed at researching the dynamics of quality related problems identified over a three-year time horizon i.e. 'longitudinal studies'. It involved a comparison of the expectations of a selection of different key informants from within and outside UK higher education sector. The overall purpose of the study was to collect empirical data to create theory and develop a model for sustaining quality improvement in UK HEIs. Achieving this purpose involved using 'field research' as a type of research strategy - principally involving a relationship between the researcher and those who are researched – for capturing the opinions and feelings of quality managers, academics and administrators in higher education on quality improvement practices. Saunders et al. (2003) and other writers, offered various strategic options with regards to methods of collecting primary data, which include, surveys, case study, action research, ethnography, and experimentations. Even though relationships between variables were identified for discussion purposes, 'experimental and 'control' groups were not set up and observed in order to confirm any cause and effect relationships between intervening variables and resultant outcomes e.g. improved managerial knowledge and performance. The main reason being, the sensitive nature of the issues concerned apart from confidentiality and time constraints. The works of Fink (1995a:3; 1995b) and Balnaves and Caputi (2001:75),

suggest that the choice of a 'survey strategy' for the field research was appropriate, because the settings for the study made direct observation of participants difficult if not impossible. The direct implication of being a critical realist or a pragmatist is that an inductive research approach will be used to implement the survey research strategy. The Field research survey strategy was implemented in two phases, beginning with the exploratory phase using questionnaires, followed by a conclusive or descriptive phase involving semi-structured interviews. Data from the exploratory phase helped in the identification of critical success factors (CSFs) - which were described in terms of their nature, role and importance to academic quality management. In summary, this sub-section examined the theoretical underpinnings of the 'research design' used in this research study. The next sub-section matches the research strategy and objectives with research methods as basis for designing research instruments for primary data collection.

2.1.2. Matching Research Strategy & Objectives with Data Collection Methods

To achieve the primary and secondary doctoral research objectives, both qualitative and quantitative data were collected. Primary data, is data collected 'first-time' by a researcher 'first-hand' for a specified purpose; secondary data, is data, collected 'second-time' by a researcher 'second-hand' for a specified purpose other than the original purpose for which it was first collected. According to Ryan and Bernard (2000:769), *qualitative* data are in the form of 'texts' and 'narratives' about human thought and behaviour – human feelings and opinions. This researcher seeks to understand the experiences of quality managers - in as rigorous and detailed a manner as possible - in order to identify categories and concepts that are grounded in *text* and *narratives*. These concepts were then linked to create a formal theory as basis for developing a conceptual model for sustaining quality improvement in UK HEIs. In contrast, *quantitative* data, however, are about 'numbers' e.g. numerical data relating to key performance results of each HEIs. Such numerical data were contained in written documentary evidence collected from interviewees - in the form of hand written notes, official records, reports, minutes of meetings and notes prepared by the interviewee. They represent useful sources of *qualitative* and *quantitative* data (Burgess, 1984:123-142). This combination of multiple methodological practices, empirical materials, and perspectives in a single doctoral study, according to proponents such as Flick (1998:231) adds rigor, breadth, complexity, richness, and

depth to any inquiry. However, the collection and analysis of both 'primary' and 'secondary' data - 'qualitative' and 'quantitative' in nature - according to Bryman and Burgess (1994:222), raises two questions. First how far can 'primary and secondary' data and 'qualitative and quantitative' research be combined. Second, how far, the collection and analysis of one type of data, influences the other. The purpose in this doctoral research study was to 'triangulate' sources and data i.e. check different findings against each other using multiple sets of data from multiple sources (Flick, 1998:231; Balnaves and Caputi, 2001:95). This is the rationale for adopting a mixed methods approach involving the use of questionnaires and semi-structured interviews.

Defining the Population and Determining the Sample

The population or sample frame of UK HEIs is represented by the List of English HEIs, receiving Funding Allocations for 2003-2004, published in *The Times Higher Education Supplement*, on March 7 (THES, 2003d:6-7). The list is made up of 77 Universities, 14 General Colleges, and 41 Specialist Institutions, i.e. a population size of 132 English higher education institutions. The focus upon the natural settings in UK higher education institutions presented this researcher with problems of selection, requiring constant selection of locations for interviews, time periods, events and people to interview (Burgess, 1984:53). A non-probabilistic *judgemental sampling* strategy was therefore adopted, because of the restrictions of time, money and willingness to participate. It was the appropriate sampling technique in this study because according to Burgess (1984:55), it is an opportunistic sampling technique that requires researchers to select individuals and organisations, which were available and willing to participate in the research. The study sample comprised of 28 schools, colleges, faculties or departments within 14 universities who were willing to participate in the survey (see Table 2.2, below). These 14 universities represent approximately 18 per cent from a total of 77 universities in England. The decision to select 14 universities was based on Scott's (2001:195) classification of UK higher education institutions in the university sector into 'seven' categories: (1) Oxbridge (2) London (3) Civics (4) Redbricks (5) Plateglass (6) Technological (7) new institutions of 1992 i.e. post-1992 universities. For this doctoral study two universities in each category have been selected to make up the total of 14 universities. Each university is represented by 2 schools or departments to give a 'manageable' overall sample size of 28 higher education institutions.

Table 2.2
Sample of Participating UK Universities
Source: Osseo-Asare Jr. (2003)

* = Sample Size = 14

HEI-Category	Number	Name of University
I. Oxbridge	1	University of Cambridge
	2	University of Oxford
II. London	3	University of Durham
	4	University of London
III. Civic	5	University of Manchester
	6	University of Birmingham
IV. Redbrick	7	University of Reading
	8	University of Exeter
V. Plateglass	9	University of Essex
	10	University of Warwick
VI. Technological	11	Loughborough University
	12	University of Surrey
VII. Post-1992	13	University of Derby
	14 *	Sheffield Hallam University

Snowball sampling is the second non-probabilistic technique (Burgess, 1984:55) that was used to select 'experts' for the semi-structured interviews. These 'Experts', 'Key informants' or 'Elites' are in the wider research community comprising of both private and public sectors including the higher education sector with experience in the use of the EFQM, MBNQA, QAA and HEFCE Models for achieving quality and performance excellence. As indicated by Coleman (1958), snowball sampling involves asking informants to put the researcher in touch with other individuals and organizations who are subsequently interviewed.

Time sampling i.e. selecting the time for interviews and to send out questionnaire is ever present in all field situations (Burgess, 1984:61-62). This researcher took note of the influence external assessment could have on the response to particular research questions (Murphy, 2002). For instance, interviews held at the time of the QAA's teaching quality assessment exercise were likely to bias the results obtained. In addition, respondents may tend to paint a more optimistic picture of the research quality management systems in place in their institution, when in reality the actual situation, is perhaps just the minimum acceptable standards for achieving quality improvement (Murphy, 2002; Longbottom, 2002).

Dealing with the Problem of Gaining Access

This researcher was aware that ethical concerns emerge when seeking access to various universities and individuals, during the data collection and analysis process and when reporting the research findings (Saunders et al., 2000:130). The conduct of this doctoral research was therefore guided by the 'Ethical Policy and Guidelines for

Research' provided by the University of Derby (Derby, 2000a). Some of the ethical issues associated with the data collection stage were general issues that apply to whichever data collection and analysis method is used; for example, the need to maintain promises about confidentiality and participant's right of anonymity, was a key issue (Wells, 1994; Saunders et al., 2000:135-139). This researcher was also aware of the fact that creating sufficient scope to fully address the research questions and objectives requires gaining permission for physical access and continuing access (Saunders et al., 2000:115). Physical access to the HEIs sampled was formally requested from top management of the institutions, namely - the principal of the college, dean of the school, or the head of department or faculty. Continuing access was maintained through regular contacts via e-mail, telephone, fax, and meetings with these experts at local and international conferences.

Primary Data Collection Using Questionnaires:

The Questionnaire used in this research study comprised of both qualitative (open-ended) and quantitative (closed-ended) questions, which were expected to elicit, qualitative (descriptive) and quantitative (scaled) responses - these responses represent primary data. The questionnaire was piloted at the Derbyshire Business School and the School of Computing and Technology within the University of Derby with very good feedback on the ease of administration and completion. These results confirmed the Questionnaire as a valid research survey instrument for collecting accurate or correct primary data in response to qualitative and quantitative questions (Fink, 1995a:41; 1995b).

Primary Data Collection Using Semi-Structured Interviews

The doctoral research interviews were mainly 'face-to-face'; with the objective of firstly, collecting 'primary' data; and secondly, 'secondary' data, in the form of documentary evidence in support of practices – either during or after the interviews. To allow for flexibility to follow-up leads, the semi-structured interviews were followed by e-mail contacts – particularly, where there were 'practical' difficulties in getting further access to key informants. The value of the information obtained via e-mail correspondence largely depended on the establishment of the necessary trust with participants. Even though this researcher was interested in what top management did, systematic observation to discover the meanings they attach to their actions and

the frequency of those actions was not carried out in this study. This was so, because of the:

- *Sensitive nature of the study,*
- *Complexity of internal politics,*
- *Time constraints,*
- *Need to maintain confidentiality and to be a full working member of the university.*

Talking informally with participants in order to gain background information about procedures, culture and values relating to their university formed part of the semi-structured interview process, and was also based on the establishment of trust with participants. To gain useful 'pre-understanding' with which to approach the primary research phase of the study, the following aspects of secondary research were carried out:

- *Firstly, a review of textbooks, magazines, journals including on-line academic indices such as ANBAR and EMERALD and various web-sites.*
- *Secondly, documentary evidence about various aspects of UK Higher Education Institutions – in particular their quality improvement programmes were obtained from participating departments.*
- *Finally, there was the taught stage of the research methods in management and business research programme – in particular: Research Design and Strategy Module; Data Collection and Analysis Module; Fieldwork Processes; Application of Skills Module; and the Research Portfolio Module, required broad reading and immersion into relevant issues.*

Summary of Choice of Research Design and Methods for Thesis

Section [2.1] provided a critical evaluation of alternative research philosophies, approaches, strategies, and methods, which helped in the selection of the most appropriate and cost-effective for this research thesis. A mix methodological approach to research is believed to facilitate the process of 'Triangulation' and the achievement of a balance perspective. The combination of multiple methodological practices, empirical materials, and perspectives in a single doctoral study, is also believed to add rigor, breadth, complexity, richness, and depth to any inquiry.

A mixed methodology is consistent with the philosophical orientation of 'critical realism', 'pragmatism', and 'coherenticism' as espoused by Tashakkori and Teddlie

(1998) and Evers and Lakomski (2001). The overall purpose was to collect both quantitative and qualitative data to create theory and develop a model for sustaining quality improvement in higher education institutions in the UK.

Section [2.1], *First*, examined the meaning of 'research' from both 'scientific' and 'human-relation' management perspectives and showed how this doctoral study may be debatably described as an example of 'pure' rather than 'applied' research.

Second, the main reason for adopting a linear doctoral research process model was because, it provided a systematic approach for thinking through research design before deciding on the appropriate research methods and instruments.

Third, it separated the meaning of research 'methodology' into two components parts: research 'design', and research 'methods and instruments' - to facilitate understanding.

Fourth, research design was defined as the structure, plan, or matrix, comprising of exploratory questionnaires and conclusive interviews; and three decision-points: the adoption of a 'critical realist' stance, an inductive and deductive 'approach' and a field research 'survey' strategy for the doctoral research study.

The overall purpose for reviewing the literature on research philosophy, approach, strategy, methods, and instruments in Section [2.1], was to set the stage for Section [2.2], which uses the 'gaps' in the literature and expert opinion to design broad and specific research questions. These questions were then incorporated into a five-part questionnaire under five research themes and semi-structured interview schedules.

2.2 Using the Gaps in the Literature and Expert Opinion to Design Research Instruments

"The selection and wording of questions are strongly influenced by the survey's context: its purposes, who asks the questions, how they are asked, who answers them, and the characteristics of respondents and responses" (Fink, 1995b:3)

This section, first restates the 'broad' doctoral research gap, the 'broad' research problem, and the 'broad' research question, which in turn leads to restatement of the primary and secondary doctoral research objectives. For the purpose of this research study, a research gap is represented by a 'gap' in the literature, and is defined in terms of the perceived or actual 'differences' between quality management *theory* and *practice* as reported by well known academics and practitioners in textbooks and reputable international journals. In the light of budgetary constraints, only highly significant 'gaps' i.e. those found to be clearly linked to the broad research problem and question were researched. Second, this section also explains the process of translating the 'broad' research question into 'specific' research questions in the design of the five-part Questionnaires and Semi-structured Research Interview Plan.

Restating the Broad Doctoral Research Gap, Problem and Question

The broad research gap may be restated 'broadly' as:

The absence or lack of an holistic and integrated model, that is appropriate for sustaining continuous quality improvement in UK higher education institutions.

Two keywords in the definition i.e. 'appropriate' and 'holistic' are well encapsulated in the following statements by Srikanthan and Dalrymple (2001:566), that:

"There is a considerable urgency for the development of an appropriate model for quality in higher education"

"Attempts to apply the Quality Management Models from Industry (e.g. TQM and Business Excellence Models) have not been fully successful."

"...a composite holistic model for quality in higher education can be developed addressing the service and education aspects synergistically."

The broad research 'problem' stemming from the broad research 'gap' is that:

Teaching and Research Quality improvement objectives and targets once achieved are not sustainable over a long-term period on a continuous basis.

The controversy over the meaning of quality and about applicability of alternative approaches to quality improvement in higher education suggest the critical issues or factors impacting on academic quality management need to be identified through empirical research. As a consequence the corresponding broad research question emanating from the above broad research problem is:

What are the criteria or critical success factors (CSFs) for deciding the appropriateness of a quality management model in UK higher education institutions?

This broad research question identifies four keywords. These are Critical Success Factors, Quality Management Model, Higher Education Institutions, and United Kingdom. The response to this question will help identify and rank the critical success factors prevailing in the macro, micro and internal environment of UK higher education as basis for model development. These keywords therefore provide the base for formulating the primary and secondary research objectives restated below.

Restatement of the Primary and Secondary Doctoral Research Objectives

To answer to the broad research question as stated above requires a set of research objectives, which are linked to each other in a hierarchical manner. The set of objectives used in this study comprises of 'four' objectives: the first three objectives below i.e. 1, 2, 3, represent the three secondary doctoral research objectives, and the fourth objective represents the primary doctoral research objective. As expected, the secondary objectives need to be achieved in order to achieve the primary objective.

1. *Identification of **Critical Success Factors (CSFs)** in the internal, external, and competitive environment in which UK HEIs operate.*
2. *Identification and Description of Best Practices linked to each CSF.*
3. *Explanation of the association between Critical Success Factors and Best Practices as basis for creating a Theory for sustaining quality improvement in UK HEIs.*
4. *Using the Theory to develop an 'appropriate model for Quality in UK **Higher Education Institutions.***

2.2.1. Breaking down the Broad Research Gap, Problem and Question into Useful Component Parts for Designing the Research Instruments

Table 2.3 below shows a break down of the 'broad' research gap into 'nine' component parts or 'gaps' by reference to the main reasons given in the literature for the lack of an holistic and integrated model appropriate for quality management in UK HEIs. It also shows the break down of the broad research problem and question into 'nine' component parts to match the broad research gap. The purpose for reducing the broad research gap into its component parts was to obtain more insight into the nature of the broad research gap, and to provide better understanding of the broad research problem and question. The link between each of the 'nine component 'gaps' to corresponding research problem and question - as presented in Table 2.3 - is described below.

Gap#1

The misconception about the meaning and relevance of critical success factors (CSFs) in UK HEIs has made it difficult for individual institutions to successfully identify, measure, and implement critical success factors for sustaining teaching and research quality improvement. This problem raises questions about the meaning and identity of CSFs in the context of quality management in individual UK HEIs.

Gap#2

The unresolved dispute over the extent of private sector contribution to the funding of public sector higher education has made it difficult for individual HEIs to effectively implement strategies for diversifying their sources of funding. This poses serious questions about the Government's long-term commitment to modernisation of the system of higher education, and about whether or not stakeholders who benefit the most from the system of higher education should be asked to pay the full economic price for higher education products and services.

Gap#3

The uncertainty over the level of engagement of HEIs in commercial or 'business' ventures remains unresolved. This represents lost opportunity because potential sources of funding remain untapped. This raises questions about how far active engagement in commercial activities will require a fundamental change in the legal status and mission of individual HEIs - with long-term serious implications for quality development.

Table 2.3
Linking Research Gaps with Research Problems and Questions
Source: Osseo-Asare Jr. (2003)

	Gaps in Literature and Expert Opinion	Research Problems and Opportunities	Example of Broad Research Questions	Example of Specific Research Questions
1	There is Misconception about the definition and relevance of the concept of Critical Success Factors (CSFs); first introduced by Daniel (1961) and applied to UK HEIs by Kanji and Tambi (1999).	The Problem of How to Effectively Identify and Measure CSFs in UK HEIs This concept has been successfully implemented in Industry and Commerce but less successful in Higher Education.	What is the Meaning of Critical Success Factors in the context of UK Higher Education Institutions?	What are the Critical Success Factors, in the internal, external and competitive environment in which individual UK HEIs operate?
2	Differences in opinion still exist about the extent to which Private sector Stakeholders should contribute to funding what is essentially, a publicly funded Higher Education sector (Harvey, 2001).	The Problem of How to successfully implement strategies for diversifying sources of funding.	How do HEIs achieve optimal balance of the conflicting needs and expectations of the diverse number of internal and external stakeholders?	Should students be made to pay tuition fees at the economic rate?
3	There are different views on the extent to which public higher education institutions should engage in business ventures to generate profits for reinvestment in teaching and research infrastructure (Barnes, 1999).	The Problem of How to Sustain a continuous inflow of financial resources for increased investment in infrastructure.	How far will active engagement in commercial activities go to change the legal status of individual HEIs?	Will active engagement in commercial activities require a fundamental change in the Mission of individual HEIs?
4	There is serious structural defect in QAA and HEFCE Models from a systems perspective (Beckford, 2002; Palfreyman, 2001)	The Problem of QAA and HEFCE Models over-emphasising 'processes' at the expense of 'inputs' and 'outputs'.	Are Process ownership and accountability, formally assigned to an individual or a team?	Is the 'person' or 'team' responsible for 'process improvement' also responsible for 'inputs' and 'outputs"?
5	Inability of UK HEIs to act strategically to change the Government's Policy of Selective Funding Allocations (Brennan and Shah, 2000)	The Problem of pre-1992 and post-1992 HEIs not being able to share good and best quality management practices in order to sustain National and International Competitiveness and Excellence	How far will the need to act strategically encourage collaborative partnership between pre-1992 and post-1992 institutions with similar Mission?	How effective are Benchmarking initiatives in promoting internal transfer of good and best practices?
6	There is significant disagreement between the HE Funding Councils and HEIs over the justification for strengthening the strategic link between Teaching and Research (Biggs, 2003)	The Problem of developing an acceptable composite definition of Quality, and sustaining its link with Excellence in a Higher Education environment	Will individual institutions be able to meet the demands of a composite definition of Quality in Higher Education?	To what extent is the definition of quality as 'fitness for purpose' consistent with reflective teaching and research practices?
7	There is misconception about whether or not the concept of 'continuous improvement' in Teaching and Learning is really feasible (Prosser and Trigwell, 1998)	The Problem of adopting a Reflective Teaching and Learning Model in order to sustain continuous improvement in the Quality of Teaching and Learning.	To what extent are the methodologies of the alternative Academic Models for Teaching and Learning, based on the theory of constructivism rather than phenomenography?	Is the EFQM Excellence Model suitable for Teaching Quality Improvement in UK Higher Education Institutions – relative to the QAA Teaching Excellence Model?
8	There is misconception about whether or not the concept of 'continuous improvement' in Research and Scholarship is really feasible (Prosser and Trigwell, 1998)	The Problem of adopting a Reflective Research and Scholarship Model in order to sustain continuous improvement in the Quality of Research and Scholarship.	To what extent are the methodologies of the alternative Academic Models for Research and Scholarship, based on the theory of constructivism rather than phenomenography?	Is the EFQM Excellence Model suitable for Research Quality Improvement in UK Higher Education Institutions – relative to the HEFCE Research Excellence Model?
9	The misconception about the meaning and applicability of TQM and TQM-driven Excellence Models in UK Higher Education (Kanji and Tambi, 2002)	The Problem of adopting a 'Totalizing' philosophy in order to sustain continuous improvement in Academic Quality.	To what extent can Academic and Non-academic Processes be aligned to TQM processes?	Should the word 'total' in TQM be replaced by the word 'sustainable' to give SQM?

Gap#4

The works of Palfreyman (2001), Beckford (2002), and Kanji and Tambi (2002) on quality models based on 'systems infrastructure' suggest that there is a serious 'structural defect' or 'gap' in the structure on which QAA and HEFCE models are based. This has led to both models placing too much emphasis on 'processes' rather than on 'inputs-processes-outputs' on a whole as required by systems theorists. This raises questions about the effectiveness of 'process' ownership and accountability, and responsibility for 'process' improvement and management.

Gap#5

The writings of Brennan and Shah (2000) suggest that the existence of sub-groups within both pre-1992 and post-1992 universities, bares testimony to the fact that these universities acting on their own or in small groups are still very much interested in protecting their interests. This has created problems about how to share 'good' and 'best' quality management practices. It questions the validity of collaborative partnerships and the effectiveness of benchmarking initiatives.

Gap#6

The disagreement between policy makers working in and for the Higher Education Funding Councils (HEFCs) and HEIs over whether or not to strengthen the link between Teaching and Research remains unresolved. This has made it more difficult to develop a 'composite' meaning of quality in higher education, raising questions about whether or not a 'composite' conception of quality will be acceptable to all stakeholders.

Gap#7

The misconception about quality management concepts such as 'continuous quality improvement', means some academic and practitioners still see commercially derived concepts as incompatible with reflective theories of teaching and learning. This raises questions about the 'suitability' of commercially derived concepts in higher education; and whether or not the QAA Model is the most appropriate for Teaching and Learning Excellence.

Gap#8

This is similar to Gap#7 above considering that the academic function comprises of teaching, learning, research, and scholarship activities. Some academics and

practitioners still argue that 'continuous improvement' is incompatible with reflective theories of research and scholarship not only teaching and learning. This raises questions about the 'suitability' of commercially derived models such as the EFQM Excellence Model in higher education, and whether or not the HEFCE Model for Research Quality Assessment should continue to be the framework for sustaining research quality improvement in the UK.

Gap#9

The misconception about the meaning and applicability of TQM and TQM-derived Excellence Models in UK HEIs according to Kanji and Tambi (2002) has made it more difficult for top management in many institutions to adopt these models. This raises questions about the role of top leadership and management in bringing about change in structure and culture required to sustaining continuous quality and performance improvement in individual HEIs.

Appendix A1 provides a detail description of the nature of the problems associated with the 'nine' research gaps. Appendix A2 provides a full list of the 'broad' and 'specific' questions derived from each problem. The questions in Appendix A2 were incorporated into a five-part Questionnaire and Semi-structured Interview schedules. Sub-section [2.2.2] below explains how the research instruments were designed and the rationale for each question. The basic principle as illustrated in Table 2.3 earlier is that each question is derived from a research problem which traces back to a research gap - by so doing this researcher ensured that the questions elicit responses that will help achieve the primary and secondary research objectives.

2.2.2. Designing the Research Instruments

The design of research instruments is based on 'questioning or communicating' methods of collecting primary data, in direct contrast to data collection methods based on 'observation'. This sub-section provides a critical evaluation of each of the research questions grouped under 'five' research themes making up the Exploratory Research Questionnaire, and the Conclusive Research Interviews. This sets the stage for Chapter Three, on Data Presentation and Analysis. For the purpose of designing the research instruments, the 18 broad and specific research questions presented earlier in Table 2.3, have been re-categorised under 'five' related research themes or subject areas as follows:

1. ***Best Practices for Excellence:***
   Academic Excellence.

2. ***Evaluation of Best Practices:***
   Best Practices in Academic Areas, Documentation of Best Practices.

3. ***Stakeholders in UK Higher Education.***

4. ***Performance Management in UK Higher Education.***

5. ***Development of Alternative Excellence Models for UK Higher Education***

A. Questionnaires for Exploratory Research

The Questionnaire comprises of 69 main questions, under the above 'five' related research themes. Part One of 17 Questions on: *Best Practices for Excellence;* Part Two of 28 Questions on: *Evaluation of Best Practices;* Part Three of 11 Questions on: *Stakeholders in Higher Education;* Part Four of 6 Questions on: *Performance Management;* and Part Five of 7 Questions on: *Development of an Alternative Excellence Models for Higher Education.* The complete set of the Questionnaire can be found under Appendix A3.

Part One: Best Practices for Excellence

The responses to Questions#1, #2, and #3 - displayed in the 'box' below - are identified by Churchill (1999:272), and Churchill and Iacobucci (2002), as representing a type of primary data. They describe the respondent's 'state of being' or 'demographic and socio-economic characteristics' brought to the job as quality managers, or senior academics and administrators, responsible for the quality of teaching and research.

Question#1:
Which of the following job positions do you occupy within your institution/school?

Question#2:
Do you have a Job Description clearly defining your responsibility for quality in your institution/school?

Question#3:
How many years experience do you have in the areas of quality and performance improvement, and/or best practice and excellence management?

Question#1 and #2 relate to 'occupation' and Question#3, relates to 'age or years of experience' of the job. These variables were be used to determine whether respondents 'management' and 'leadership' styles are related to their job positions,

job descriptions, and years of experience on the job. According to Wind (1978:317-337), the responses to such questions will help delineate the higher education market segments in the UK.

The responses to Questions#4, #5, #6 and #7 - shown in the 'box' below - are about the link between 'structure', 'people', and 'communication'. They are described in the literature as providing primary data, on respondents' work environment; relating to the context in which quality managers organise their work (Warner and Crosthwaite, 1995:1-6; Rushton, 2001:169-177; Knight and Trowler, 2001:47-68). Questions#4, #5, #6 and #7, are therefore linked to Questions#1, #2, and #3, above. Question#4 is about 'formal structures for quality management', Question#5, is about 'the positions of academic and non-academic staff in the formal structure', and Question#6 and #7, relate to the effectiveness of internal 'communication' systems at school and institutional levels. These variables i.e. structure; people; and communication, have been used in this thesis to determine the extent to which there is a deliberate strategy for achieving and sustaining quality and performance management at both school and institutional levels, in the participating UK higher education institutions.

Question#4:
Does your institution/school have a dedicated division/department/section solely responsible for quality management issues e.g. Teaching and Research Assessment Scores?

Question#5:
Does your institution/school have personnel at top management level e.g. deanery with responsibility for leading and formulating institution/school-wide quality improvement strategies?

Question#6:
Do you know your institution's/school's most recent QAA Score?

Question#7:
How would you describe your institution's/school's internal reporting system for quality management?

The responses to Questions#8 - see 'box' below - is about the meaning and relevance of the notion of 'Excellence' in higher education environment; described in Churchill (1999:277), and Churchill and Iacobucci (2002), as providing primary data, on the respondent's level of awareness and knowledge as quality managers.

Question#8:
Please define or describe briefly the notion of 'Excellence' in the context of your institution/school based on your personal observation and experience?

Question#8 is therefore linked to Questions#1 to #7 above. The response to this question helped determine the extent to which respondents are knowledgeable about current quality management terminology.

Like Question#8, Questions#9, #10, and #11 - in the 'box' below - are in a separate category. The responses to these questions are related to the effectiveness of external models for assessing quality and performance in higher education, with particular reference to national models such as the UK's QAA Model for Teaching Quality Assessment (QAA, 2002a). Question#9, is about the impact of the QAA model on institutional efforts to improve teaching quality; Question#10, is about the 'strengths and 'weaknesses' inherent in the QAA Model as determined by practitioners; and Question#11, relates to what practitioners see as the philosophical underpinnings of the QAA Model. The responses will help determine the level of maturity of the QAA Model toward TQM practices in the participating UK HEIs.

Question#9:
Have the UK Quality Assurance Agency's requirements for quality improvement in higher education brought about significant quality improvement in your institution/school?

Question#10:
In your opinion what are some of the major strengths and weaknesses in the use of QAA procedures for quality management in higher education?

Question#11:
Into which category would you put the QAA procedures for assuring academic quality?

Question#12:
Which of the following Student perception measures have been implemented within your institution/school?

Question#13:
Which of the following Academic and/or Administrative Staff perception measures have been implemented within your institution/school?

Question#14:
The following perception measures are recognized by external agencies (e.g. QAA; Funding Councils; Publishers of League Tables; which of these have been implemented within your institution/school?

Question#15:
To establish the views, needs and priorities of staff, a range of approaches is used to capture direct feedback. Which of the following approaches have been implemented in your institution/school?

Question#16:
Which of the following perception measures have been implemented in your institution/school, in order to measure the perception the community/society has about your institution/school?

The responses to Questions#12 to #16 - see 'box' above - relate to the measures used by higher education institutions, to capture the 'perceptions' held by key internal and external stakeholder groups on institutional quality and performance. Question#12 and #13 are about measures for capturing 'students' and 'staff' perceptions about internal quality and performance levels. Question#14, is related to measures for capturing the perception of 'external funding bodies' such as the QAA and HEFCE; Question#15, is about measures for capturing staff feedback, which may be related to Question#13. Question#16, relates to measures for determining the perception held by the community or society in which the institution operates. The responses to these questions provide primary data, on the speed with which individual respondents, and their respective institutions respond to the need and expectations of internal and external stakeholders. Finally, the response to Questions#17 will help determine the extent to which previous QAA exercises have brought about significant improvement in well-known TQM critical success factors. This question is related to Questions#9 to #11 above, and is aimed at providing more insight into the extent to which external models have impacted on internal assessment procedures.

Question#17:
To what extent do you agree that previous QAA exercises conducted within your institution/school resulted in achieving improvements in the following performance measures?

Part Two: Evaluation of Best Practices

Part Two covers 28 Best Practices that, represent the characteristics of an excellent higher education institution, defined here as institutions with the capacity and ability to produce world-class or best-in-class results. Best practices are defined as practices that are deemed *highly* important and *highly* effective in delivering world-class performance results. The works of Bargh et al. (2000) suggest that, quality managers' normal pattern of behaviour are represented by their attributes or traits. These attributes are important and effective in affecting the behaviour of their subordinate staff. Question#1 to Question#12 - listed below - are about 'leadership involvement' in quality management activities. The twelve questions respectively represent the link between 'leadership' and 'mission and objectives'; 'culture for excellence'; 'staff work-reward systems'; 'collaborative partnerships'; 'social responsibility issues'; 'personal development'; 'process ownership'; 'interface management'; 'stakeholder

satisfaction and delight'; 'quality and excellence champions'; 'external reporting mechanisms'; and 'marketing research'.

Question#1:
Your personal involvement in the development and communication of the school's mission and vision, using top down, bottom up and horizontal communication channels.

Question#2:
Your personal and active involvement in sharing best practice and knowledge as basis for creating and sustaining a culture of excellence.

Question#3:
Your personal and active involvement in aligning staff job descriptions and reward systems with quality improvement policy and strategy in order to identify and prioritise quality improvement activities.

Question#4:
Your active involvement in encouraging and supporting inter-departmental and inter-school collaboration through participation in partnerships and joint improvement activities.

Question#5:
Your personal involvement in stimulating and sustaining staff involvement in health and safety, the environment and social responsibility issues through timely recognition of both team and individual efforts at all levels within the school.

Question#6:
Your personal involvement in acting upon your own future leadership requirements and upon the findings of learning activities.

Question#7:
Your personal and active involvement is aligning the school's structure, human resource plans, and key processes with its quality improvement policy and strategy in order to sustain team effort.

Question#8:
Your personal and active involvement in ensuring that an integrated system for managing quality improvement processes is developed, implemented and controlled.

Question#9:
Your personal and active involvement in determining and meeting the present and future needs, expectations and concerns of all identifiable stakeholders, e.g. students and staff.

Question#10:
Your personal and active participation in professional bodies, conferences and seminars, in order to promote and support strategies for sustaining quality improvement in higher education.

Question#11:
Your personal and active involvement in communicating your school's quality improvement objectives and targets to all identifiable stakeholders.

Question#12:
Your active involvement in information gathering to help define the market and market segment the school will operate in both now and in the future.

Question#13 to Question#21 - as listed below - are about 'mission, vision, values, principles, policy, strategy and objectives and targets for quality involvement in teaching and research activities. These questions respectively represent the link between 'policy and strategy' for quality improvement and 'information' from

multiple sources (#13); 'competitive advantage' (#14); 'risk and uncertainty' (#15); 'policy deployment' (#16); 'staff appraisal' (#17); 'objectives and targets' (#18); 'synergy creation' (#19); 'acquisition and utilisation of funding' (#20); 'support-service quality' (#21);

Question#13:
Basing quality improvement policy and strategy on information from internal and external performance indicators, marketing research and learning activities.

Question#14:
The need for quality improvement policy and strategy to clearly identify present and future critical success factors as basis for gaining competitive advantage.

Question#15:
Incorporating alternative scenarios and contingency plans into quality improvement policy and strategy to address risk and uncertainty in the future.

Question#16:
Your active involvement in the deployment of quality improvement policy and strategy throughout the school, through a framework of key/core processes.

Question#17:
Your regular evaluation of academic and/or administrative staff awareness of quality improvement policy and strategy throughout the school.

Question#18:
Your active involvement in encouraging the use of quality improvement policy and strategy as basis for planning improvement activities and setting improvement objectives and targets throughout the school.

Question#19:
Your active involvement in the creation of synergy in partnership relationships. In order to improve key processes and add value to both the internal and external customer-supplier chain.

Question#20:
Your personal and active defence of the requirements for funds in support of quality improvement policy and strategy implementation.

Question#21:
Your active involvement in managing the maintenance and utilization of buildings, equipment, and materials to improve total asset life cycle performance.

Question#22 to #28 - as listed below - like Questions#1 to #12 are about 'leadership involvement' in quality management activities. These questions respectively represent the link between 'leadership' and 'strategic evaluation processes' (#22); 'information and knowledge management' (#23); 'change management' (#24); 'new process introductions' (#25); 'process design' (#26); 'systematic approaches' (#27); 'balancing financial and non-financial performance measures' (#28).

Question#22:
Your active involvement in identifying and evaluating alternative and emerging technologies in the light of changing quality improvement policy and strategy and their impact on the school and society.

Question#23:
Your personal involvement in collecting, structuring, and managing information and knowledge, in support of your school's quality improvement policy and strategy.

Question#24:
Your personal and active involvement in piloting and controlling the implementation of new or changed processes.

Question#25:
Your personal and active involvement in identifying and prioritising improvement opportunities and other process changes both incremental and breakthroughs.

Question#26:
Your personal and active involvement in designing key processes needed to deliver quality improvement policy and strategy, based on operating philosophies and enabling technology, and setting process performance targets.

Question#27:
The need to be involved in the implementation of a systematic approach to measuring customer/stakeholder perception of the school.

Question#28:
Your personal and active involvement in identifying a comprehensive set of upstream financial and non-financial performance indicators that can be compared with targets and benchmarks.

Part Three: Stakeholders in UK Higher Education

Part Three comprises of 11 questions - listed in the three 'boxes' below - on various stakeholders with different long-term interests in higher education. Question#1, is on the relative power of each stakeholder to influence academic quality development; Question#2, looks at the relative benefit derived by each stakeholder from improvements in academic quality; and Question#3, evaluates stakeholders in terms of their long-term interests in higher education.

Question#1:
Please evaluate the following stakeholders in terms of their power to influence the quality of teaching and learning in UK higher education institutions.

Question#2:
Please evaluate the following stakeholder groups in terms of the relative benefits each group would derive from improved quality of teaching, research, and support-services, in UK higher education institutions.

Question#3:
Please evaluate the following stakeholder groups in terms of their sustained interests in the survival of the higher education system in the UK.

The debate about whether or not stakeholder groups who benefit the most from the provision of higher education, be made to pay for the benefits they derive at the economic rate is dealt with in Question#4. Question#5, determines the extent to which publicly funded higher education institutions ought to be allowed to enter into

business ventures, in order to raise funds for future expansion. Question#6, evaluates the ability of respondents to accurately predict future trends in government policy, and to make a judgement on how a shift in policy would impact on quality development in the institution. Question#7, evaluates various stakeholder groups in terms of the contributions they make towards quality development in higher education.

Question#4:
Should stakeholder groups who benefit the greatest from the provision of higher education be made to pay for the benefits in amounts proportionate to the benefits derived?

Question#5:
Should higher education institutions be allowed to set up businesses; with their various stakeholders providing capital; and profits reinvested in the development of the institutions; as further development of their collaborative partnership with other organisations?

Question#6:
In the very long-term say 25-50 years, do you foresee a shift in central government policy from the present 'cut in government funding' for higher education to 'increase in funding'?

Question#7:
Please evaluate the following stakeholders in terms of the positive contributions they make towards the achievement of the quality and performance objectives of your school/institution.

Question#8 to Question#11 deal with institutional measures for capturing the perceptions different stakeholders have about the institution's quality and performance. These questions respectively cover the perceptions of: students as customers; academic and administrative staff; external funding bodies; and society or community in which institutions operate.

Question#8:
Evaluate the following student/customer perception measures in terms of their relative importance in delivering quality improvement in your school/institution.

Question#9:
Please evaluate the following academic and/or administrative staff performance measures in terms of their importance to the delivery of improved quality within the school/institution.

Question#10:
Please evaluate the following perception measures – recognized by external funding agencies and publishers of League Tables – in terms of their relative importance in the formulation of quality and performance improvement strategies within the institution/school.

Question#11:
Please evaluate the following perception measures in terms of their relative importance in measuring the perception the community/society has about the institution/school.

Part Four: Performance Management in UK Higher Education

Part Four comprises of 6 questions - listed in the two 'boxes' below - aimed at capturing respondents' views on the relevance of performance measures, performance indicators, and performance management in higher education institutions. Question#1 and #2, are respectively on the 'relevance' and 'usefulness' of 'performance measures' and 'performance indicators' in assessing quality and performance in higher education. Question#3, seeks to determine any association between staff performance indicators and staff reward systems.

Question#1:
In your opinion based on your own experience, is the use of performance measures, relevant in assessing individual and organisational levels of performance in a higher education environment?

Question#2:
Do you find the use of performance indicators in assessing the quality of teaching and research useful?

Question#3:
In practice do you link any of your staff performance indicators (e.g. high research assessment exercise scores) to a staff reward system (e.g. staff promotions)?

Question#4 and Question#5 below, reflect the current agenda of the UK Labour Government to widen participation in higher education, in relation to the extent to which institutional attempt to 'widen participation' impacts on Entry Standards and Standards of Awards. Question#6 evaluates specific 'performance indicators' in use in most UK higher education institutions in terms of their relative importance and effectiveness for making internal judgements about the level of academic and administrative quality; this is directly linked to Question#1 and #2 above.

Question#4:
In view of the current political interest in widening access to higher education, do you consider Entry Standards in your school/institutions, as 'declining' or 'improving'?

Question#5:
Do you consider the difference between the Entry Standards and the Standards of degree awarded by your school/institution as 'widening' or 'narrowing'?

Question#6:
Please evaluate the following performance indicators in the school/institution for making internal judgements about the levels of academic and administrative quality, in terms of their relative importance and relative effectiveness in contributing to significant improvement in the quality of teaching and research.

Part Five: The Proposed Alternative Excellence Model For UK Higher Education

Part Five is the final part of the Questionnaire, and comprises of 7 questions - listed below - on the proposed model for sustaining quality and performance improvement in UK higher education institutions. The proposed structure of the model is based on current literature and not on empirical data. The main aim is to test current concepts as basis for developing the final model. Question#1, is on possible areas of higher education that needs to be included in the model; Question#2, determines the possibility and feasibility of integrating different areas of activity in a higher education environment; Question#3, determines the continuous relevance of marketing orientation in higher education; Question#4 and #5, attempts to determine how respondents' rank 'leadership' and 'processes' as critical success factors; Question#6, attempts to confirm some of the known critical success factors in higher education; and Question#7, puts forward a structure for the proposed quality management model.

Question#1:
Which of the following areas of higher education should a proposed model for quality improvement in higher education cover?

Question#2:
In your opinion is it 'possible' and 'feasible' to integrate models for improving the quality of academic activities with models for improving the quality of administrative activities?

Question#3:
In your view is the determination and satisfaction of the needs and expectations of the UK government agencies, such as the QAA and HEFCE, a critical success factor in the successful implementation of a model for quality and performance improvement in higher education?

Question#4:
Which of these two: 'Leadership for quality improvement' and 'Core processes for quality improvement', would you rank as the single most important critical success factor for sustaining quality and performance improvement initiatives in a higher education institution.

Question#5:
In your view which of the following premise should underpin a model for sustaining quality and performance improvement in UK higher education institutions?

Question#6:
Please evaluate the extent to which the proposed model structure, highlights the key factors for sustaining quality improvement which meets both internal and external requirements.

Question#7:
In your view does the proposed pictorial representation depict the holistic and integrated nature of the proposed model structure in Question#6 above?

All the closed-ended questions in the Questionnaire represent *nominal-level* questions designed to elicit only fixed alternative responses that helped to categorise respondents - with no meaningful distance between the categories. There was only one *ordinal-level* question i.e. Question #4, Questionnaire Part Five, it asked respondents to answer in rank order but does not tell them how far apart the intervals were. More than 60% of the questions asked may be described as *interval-level* questions with true zero points represented by the 'not at all important' and 'not at all effective' boxes. As such they also represent *ratio-level* questions - they include all the 28 Likert scale Questions in Questionnaire Part Two - for evaluating the degree of *importance* and degree of *effectiveness* of pre-selected quality management practices. Balnaves and Caputi (2001:77) suggest that, a summative scale is subject to the 'halo' or 'bias' or 'error' tendency for overall positive or negative evaluation of the practice being rated. They are however used in this thesis to help score responses to each practice by summing up the individual responses to obtain an overall scaled score.

B. Semi-Structured Interview Plans for Conclusive Research

The semi-structured interview schedules in Appendix A4 comprise of the same 'five' research themes used for the Questionnaire design. Appendix A2 provides a full list of broad and specific research interview questions, and Table 2.4 below, presents a sample of these questions under each research themes.

Table 2.4
List of Interview Themes, and Sample of Broad and Specific Interview Questions
Source: Based on Current Literature

No.	Themes of Subject Areas	Broad Questions	Specific Questions
1	Best Practices for Excellence; Academic Excellence	How would you explain the term 'Excellence', and in which areas of the school has it been or is it being applied?	What does Excellence in Teaching mean?
2	Evaluation of Best Practices; Best Practices in Academic Areas; Documentation of Best Practices	In your view, what is a 'Best Practice', and has the concept been successfully implemented in the areas of Teaching and Research within your School?	Is there any relationship between 'Excellence' and 'Best Practice'?
3	Stakeholders in Higher Education: Critical Success Factors	Apart from Teaching and Research activities, what other activities should higher education institutions engage in as source for funding?	Do you think academics can be successful administrators?
4	Performance Management in Higher Education	In your own opinion, are performance indicators as basis for assessing performance in higher education still relevant?	In your own opinion, what are the benefits and limitations of using performance indicators in higher education?
5	Development of an Alternative Excellence Models for UK Higher Education; TQM and EFQM Model in Higher Education	Are you aware of 'Excellence Models' based on the TQM or the EFQM Models for managing quality in UK Higher Education Institutions?	Is political correctness one of the reasons for not adopting TQM and EFQM Excellence Models?

Interviewees were sent a formal letter containing a list of interview themes but not the specific questions - which were asked during the interview process itself. The broad research questions were derived from the five themes; and the specific research questions were in turn derived directly from the broad questions and the preliminary analysis of the questionnaires received and interviews already conducted. Some new questions and themes were also generated and identified during the interviews, which were later added to the list in Appendix A2.

2.2.3. Developing a Methodology for Calculating Perception Gaps Based on the Functional Relationship Between 'Efficiency' and 'Effectiveness'

Chapter One defined 'efficiency' and 'effectiveness' and established the functional relationship between the two criteria used by Blazey (1997) and later by Zairi (2000a) to evaluate best practices for customer complaints management systems. This section justifies the use of this functional relationship as basis for developing a methodology for calculating perception gaps in respondents' response to the 28 questions under Questionnaire Part Two. Both Blazey (1997) and Zairi (2000a) both used likert scales to capture respondents' perception of the degree of 'importance' or 'efficiency' and the degree of 'effectiveness' of a best practice. The number of 'boxes' used were in the ratio of 1:2 = importance:effectiveness; i.e. 5 boxes for capturing the degree of importance and 10 boxes for capturing the degree of effectiveness of practice. Respondents were expected to complete the response boxes for 'degree of importance' and 'degree of effectiveness' at the same time. This is based on the theoretical assumption that in order to understand the nature of the functional relationship between efficiency and effectiveness the two best practice evaluation criteria need to be assessed simultaneously. Ideally, it makes sense to use the same number of boxes to evaluate the two criteria. However, it was deemed unnecessary in this research study, for two reasons. First, Blazey (1997) and Zairi (2000a) have used equal and uneven number of 'boxes' in similar circumstances. Second, it the view of this researcher that the number of boxes for each criteria need not be the same because the 'absolute' values of the responses were converted into percentages which effectively cancelled out the effect of using uneven number of boxes. The works of Jarrar and Zairi (2000a; 2000b) suggest that best practices may be defined as practices that are 'highly' important and 'highly' effective in delivering superior performance results. This suggests that the maximum score of 100% for each criteria is the 'standard for

excellence' against which a particular management practice ought to be evaluated. This means 'scaled response scores' below 100% creates 'perception gaps' which needs to be measured and alternative strategies for closing the gaps generated and expressed explicitly in terms of strategies for improvement on 'weak' or 'poor' quality management practices. Since exiting literature unfortunately does not provide a clear definition of 'weak' and 'good' practices, this doctoral research study aims to develop a conceptual framework based on the empirical data collected for measuring perception gaps and generating alternative strategies for closing the gaps.

2.2.4. Summary of Chapter Two and Link with Chapter Three

This chapter reviewed existing literature on alternative research philosophies, approaches, strategies, methods, and instruments. It provided a strong justification for adopting the philosophical orientation of critical realism; the use of an inductive approach and a deductive approach; the choice of a survey research strategy; and the use of questionnaires and semi-structured interviews as the research instruments. The process of deriving broad and specific research questions from research problems under five research themes were explained in the design of the questionnaires and the interview schedules. In brief outline the most appropriate cost-effective options are:

- *Research philosophy is 'critical realism' which is also associated with 'pragmatism' and 'coherenticism';*
- *Research approach mainly inductive in the sense that meaning is grounded in the empirical data collected, combined with limited use of deductive technique of significance testing;*
- *Research strategy is a field research survey of a sample of UK HEIs;*
- *Research method is a mix of techniques for collecting primary quantitative and qualitative data;*
- *Research instruments are hand delivered questionnaires and face-to-face semi-structured interviews.*

Chapter Two also established the rationale for using the functional relationship between 'efficiency' and 'effectiveness' as basis for developing a framework for capturing and measuring respondents' perception of quality and performance, and using that to generate and evaluate alternative strategies for improving on weak quality management practices. The next chapter provides justification for selecting a particular method of presenting and analysing the empirical data collected.

chapter | three

DATA PRESENTATION AND ANALYSIS

The purpose of Chapter Three is twofold; first, to present the primary and secondary quantitative and qualitative data collected using Questionnaires and Semi-structured Interviews as the research instruments. The presentation involves the use of simple diagrammatic representation tools and techniques in the form of tables, pie charts, and bar charts. Second, to analyse the qualitative and quantitative data using a combination of inductive and simple statistical techniques. This chapter comprises of two sections: Section [3.1] Presentation of Quantitative and Qualitative Empirical Research Data; and Section [3.2] Analysis of Quantitative and Qualitative Empirical Research Data. The overall aim is to provide a sound basis for Discussion of Results and Interpretation of Findings in Chapters Four and Five respectively.

"If your data remain in essentially the same form in which you originally collected them, pages and pages of notes and interview protocols, I hope you don't attribute your problem to 'writer's block'" (Wolcott, 2001:41)

3.1

Presentation of Quantitative and Qualitative Empirical Research Data

"Increasingly, authors and researchers who work in organisations and with managers argue that one should attempt to mix methods to some extent, because it provides more perspectives on the phenomena being investigated" (Easterby-Smith et al., 2002:41)

This section presents the quantitative and qualitative data collected over the three-year period of the doctoral research study. In Section [3.2], the quantitative data are subjected to simple statistical analysis, and the qualitative data to inductive analysis using a simple coding system. The primary research data are represented by the responses to the Questionnaires and the Semi-structured Interview questions. Most of the secondary data in the public domain, have already being presented and analysed as part of the review of literature and research methodology in Chapters One and Two. The other types of secondary data examined in this chapter represents internal documentary evidence of good and best practices, which were only available to respondents and interviewees and not in the public domain – in the form of written and non-written materials. Most of these 'documentary evidence of practice' are hard copies or sourced from different web-sites. This researcher recognised the importance of Data Presentation as an initial step in the Data Analysis Process; and saw the process of aggregating data into tables, charts, and graphs as representing preliminary analysis of data. The separation of the data presentation section from the section on data analysis is to help in the audit trail of data from the moment they are captured by the questionnaire and tape recorder until they are transformed into relevant information or research findings.

Responses to Questionnaires – Documentation and Presentation Quality

From the onset of the fieldwork in April 2002, a duplicate file was opened to document all completed questionnaires from respondents. All receipts were matched against the number of questionnaires sent out in order to monitor the response rate and to facilitate follow-ups. Efforts to improve the response rate included e-mail and

telephone contacts with main contacts to remind them of the importance of getting their staff to return the completed questionnaire. At a later date, the questionnaire responses were transferred into the SPSS file set up to receive the data as per respondent.

Semi-Structured Interviews - Transcription and Documentation Quality

The semi-structured interviews were audio-taped, using a one-touch micro cassette recorder by Thomson-Dk40. The discourse between the researcher and the interviewee were therefore stored on 60 minutes dictaphone micro cassette, for later transcription. The duration for each interview was between 60 minutes and 120 minutes, with coffee breaks on request. The dictaphone micro cassettes have been duplicated, with the original copies kept under lock and key in a secured location for future retrieval. As expected an hour-long tape took at least three hours to transcribe. In line with the need to maintain confidentiality, the tapes were to be made available to thesis supervisors and external examiners only.

Poland (2002) (cited in Gubrium and Holstein, 2002:629) recommends transcription of audio-taped interviews as a method for making data available in textual form for subsequent sampling, coding and analysis in qualitative research. This use of transcription according to Poland (2002) is widespread in qualitative research analysis. As a critical realist, this researcher ensured that transcripts were verbatim facsimiles of what was said in interviews, in line with similar approaches adopted by Edwards and Lampert (1993) and Du Bois et al. (1993). According to Poland (2002:630), this approach reflects a bias towards a realist ontology that is particularly evident, for example, in qualitative research in the natural sciences. It is therefore typical to assume that the interview adequately captures social reality as it is experienced and expressed by respondents, and that the translation from audio-tape and then to text is not inherently problematic, so long as careful attention is given to ensure accuracy of transcription (Poland, 2002:630). Two hard copies of each interview transcript, referred to here as the 'transcription' document were printed for storage 'manually' in well labelled files and for preliminary inductive analysis. This means copies of transcripts for each interviewee were kept in a file and locked-up in a filing cabinet in line with confidentiality and copy write concerns. A second file containing the same set of transcripts were also prepared for inductive analysis.

Using a Mixed Presentation Style to Achieve the Desired 'emic-etic' Balance

The term 'emic-etic' balance relates respectively to the subjectivity – objectivity balance, which defines the epistemological characteristics of the researcher's philosophical stance (Murphy, 2002). For instance, by assuming a philosophical position of a 'pragmatist' this researcher will have to accept both objective i.e. 'etic' and subjective i.e. 'emic' responses from respondents (Tashakkori and Teddlie, 1998). Subjective reporting style means citing the actual opinions and feelings expressed by individuals interviewed in the thesis write-up. This will require a descriptive form of writing as explained below. Objective reporting however will be in the past tense from the position of a third party. This is referred to as 'academic or technical' reporting style by Fink (1995b:61) for presenting reports specifically for an academic audience rather than general audiences. A great deal of technical details will be expected to accompany the results and recommendations.

According to Fink (1995b:57) a useful written report provides enough clearly explained information so that at least two interested individuals can agree on the doctoral research objectives, methods, and conclusions. This doctoral thesis will be submitted to an internal assessor within the University of Derby and an external examiner within the wider research community. In deciding what to include and how long the thesis presentation should be, this researcher followed the regulations laid down by the Derbyshire Business School, which stipulates a total 80,000 - 100,000 words (Derby, 2000a).

According to Burgess (1984:181), the data analysis that is presented by the researcher will be both 'descriptive' and 'analytic', however, the presentation depends upon the theoretical perspective that is used, the goals of the researcher and the audience that the researcher wants to address. Burgess (1984:181) also argued that a research report needs to indicate at which descriptive level the researcher is working; the description of the culture, the themes and concepts of the social scientist, configurations of themes in the cultures studied or at the level of theory. Various writers including Schatzman and Strauss (1973) have identified different ways in which studies may be written. First, there are descriptive accounts where the emphasis is upon providing detailed description, which is informed by theoretical schemes. Secondly, there are accounts that provide analytic descriptions whereby the conceptual scheme used is developed on the basis of the data that are obtained. Thirdly, there are substantive

theoretical accounts that are concerned with substantive theory where the researcher generated theoretical statements that will have applicability beyond the individual case that has been studied. This doctoral researcher used a mixed reporting style comprising of the three different ways of writing described by Schatzman and Strauss (1973). This mixed approach according to Burgess (1984:183) combines the depth, colour and richness of personal experience with understanding, explanation, theories and data in order to make some contribution to knowledge. In this way this researcher hopes the doctoral thesis would make substantial contribution to knowledge.

The Questionnaire responses helped identify critical success factors (CSFs) required to sustain quality improvement in UK HEIs - a list of these factors are presented with brief definition of each factor in terms of its nature, role and importance to quality management. The 'textual' data collected during the interviews were used to give a detail descriptive account of each CSF identified by the questionnaire survey. The descriptive account, is informed by theoretical schemes based on the themes identified from the textual data analysis (Burgess, 1984:182). This means the personal experiences of respondents and interviewees are frequently cited in the presentation. According to Wolcot (1994:10), in rendering a descriptive account the researcher should stay close to the data as originally recorded, so that informants themselves seem to tell their stories – the strategy is to treat 'descriptive data as fact' based on the assumption that 'data speak for themselves'.

The sub-sections below present the empirical research data using diagrammatic presentation tools and techniques including Tables, Pie Charts, Simple and Multiple Bar Charts. The spreadsheet tables are part of the versions of the Statistical Package for the Social Sciences (SPSS) and Microsoft Excel software used. Most of the qualitative primary data are in the form of 'narratives' i.e. 'textual material' contained in 'transcripts' of Interviews or 'descriptive' accounts in response to 'open-ended' questions contained in the Questionnaires.

3.1.1. Quantitative and Qualitative Primary Data Presentation

56 out of 112 Questionnaires were returned, representing 50% response rate, which is within the 30-50% range deemed reasonable for Hand-delivered Questionnaires by Dillman (1978), Witmer et al. (1999), and Saunders et al. (2000:282). 14 out of the 56 returned questionnaires were not satisfactorily completed because of serious errors of

judgement on the part of respondents, and were therefore not presented or included in the analysis; this means 42 out of the 56 returned questionnaires were fully completed. The responses to the 42 questionnaires are presented below in Five Parts, with a clear distinction between 'quantitative' and 'qualitative' responses. The former represented by response to 'closed' questions demanding a choice between fixed alternatives answers; and the latter response to 'open-ended' questions, requiring respondents to provide answers in their own words rather than being limited to choosing from a set of 'fixed' alternatives.

A. Quantitative and Qualitative Responses to Questionnaire Questions

The SPSS and Microsoft Excel Data Presentation Spreadsheet formats used, captured 'quantitative' responses, and not 'qualitative' responses to questions demanding 'reasons' or 'explanation' for selecting a 'fixed' alternative response to a question. The symbols used in the SPSS and Microsoft Excel Tables, such as: 'id' stands for the 'identity' of the participating higher education institution; and 'q1' for Question Number 1 or #1. The 'numbers' in 'cells' under each question, represents fixed alternative responses specified for closed questions. All SPSS Spreadsheets are accompanied by their associated 'variable' tables, showing the identity of participating higher education institutions, question number, the exact label for each question, and 'value' or nature of the response to a question e.g. as in Questionnaire Part One, below.

Questionnaire Part One: SPSS Data Presentation

Appendix B1, shows the use of SPSS version 10 for Windows software to present the responses to 10 out of 17 Questions, represented as: q1, q2, q3, q4, q5, q6, q7, q9, q11, and q17 excluding q8, q10, q12, q13, q14, q15, and q16. The responses to Question#8 and Question#10, i.e. 'q8' and 'q10' - which are 'open-ended' questions; and the 'narrative' parts of Questions#1, #2, #4, #5, #6, #9, #11, are presented as 'textual' or 'qualitative' data. Questions#12, #13, #14, #15, and #16 relate to Part Four, the responses to these questions are therefore presented later below. Appendix B1 also presented the 'variables' associated with the responses to each question. Table 3.1 below, presents the responses to Question#8 and #10, which are 'open-ended' questions; and the 'narrative' parts of Questions#2, #4, #6, #9, #11, for a higher education institution (id = 1), in the UK.

Table 3.1
Sample Responses to Open-Ended Questions for a UK Higher Education Institution of the Oxbridge Category [id = 1]
Source: Osseo-Asare Jr. (2003)

QN = Question

QN	Category of Question	Open-Ended Responses and Reasons for Choosing a Fixed Alternative
2	Job Description	I joined the University first as an Administrative Officer, and was given a Job Description to that effect, which detailed what I was to do as an administrator in support of academic activities. At the time I was not given specific responsibility in the area of academic quality. The additional responsibility for teaching quality came about following my promotion to a Senior Administrative position, which was communicated to me via memos, notes, reports, and minutes of meetings, but not through a formal job description.
4	Structure for Quality Management	We do not have a dedicated division within the University responsible for quality management; but we do have a dedicated Quality Teams, Circles, or Committee, with well-defined responsibilities. For example; there is The Academic Quality Committee at top management level, responsible for strengthening External Relations with Quality Assessment Agencies such as the Quality Assurance Agency (QAA); and Quality Teams at the operational level, responsible for implementing teaching and research quality improvement strategies.
6	Effectiveness of Internal Communication	Not Yet, perhaps because I'm not directly concern with the output side of Teaching Quality Improvement, but with the inputs and aspects of processes. I get to know the results eventually, but from my point of view it is not a critical issue in my decision-making process.
8	Definition of Academic Excellence	It is or ought to be about achieving and sustaining world-class performance results in key academic areas such as teaching, learning, research and scholarship.
9	Impact of QAA on Internal Quality	From our experience at the institutional level, improved scores signifies improved external relationship with our external stakeholders, in particular Funding Bodies. At the departmental level, it has brought about process improvement in some areas.
10	Strengths and Weaknesses of QAA Model	Strengths: 1. Increased awareness of quality among academic and non-academic Staff 2. Process Improvement 3. Basis for Funding Allocation 4. Improvement in External Relations with External Stakeholders Weaknesses: 1. Main driver for internal quality improvement 2. Too much emphasis on 'Processes' and 'Outputs' at the expense of 'Inputs' 3. Too much emphasis on 'assessment' after the event, in that sense, in it a retrospective approach. 4. It more about 'assurance' and not about 'management'
11	QAA Model and Evolution of TQM	The procedures adopted by the QAA Model are essentially 'inspection-based' regimes. The Model is however, slowly evolving into a prevention-based approach in some departments or colleges in my university.

Note:
From the SPSS Spreadsheet in Appendix B1, it can be seen that this respondent choose fixed alternative responses for Questions: 1, 2, 3, 4, 5, 6, 7, 9, 11, and 17. Questions: 8 and 10 are 'open-ended'. Questions: 12 – 16 relate to Questionnaire Part Four, and therefore transferred to Part Four Below.

To facilitate analysis, the responses to Question#17, have been split up into 'seven' parts from #17.1 to #17.7. The responses to Question#1 i.e. 'q1' will be used to illustrate the content of each 'cell'. For instance, the participating HEI with 'id = 1', choose the fixed alternative response number '2 = Senior Administrative Officer', in response to 'q1' requesting to know the position occupied by those responsible for quality management in the participating institution.

Questionnaire Part Two: Microsoft Excel Data Presentation

Appendix B2, shows the use of Microsoft Excel spreadsheet format to present the 'two-part' scaled-responses to all 28 questions in Part Two of the Questionnaire. All the responses are being treated as 'quantitative data'. Table 3.2 below, presents the

complete responses for a participating HEI from the 'oxbridge' category. For instance, for any 'key activity' such as teaching and research, nine 'core quality management practices' have been identified, and categorised into specific practices.

Table 3.2
Sample Quality Management Practice Evaluation Score for a UK 'Oxbridge' Higher Education Institution [id = 1]
Source: Osseo-Asare Jr. (2003)

QN = Question or Practice Number; **STES** = Sub-Total Evaluation Score = Score for Importance + Score for Effectiveness; **TSFEA** = Total Score For Each Area or Core Practice

No.	Core Practices	QN	Categorisation of Practices	STES	TSFEA
1	Leadership Practices	#1	Mission, Value, Policy, Strategy, Objectives	8	
		#2	Culture of Excellence	6	
		#3	Staff Job-Reward Alignment	4	
		#4	Staff Encouragement and Support	4	22
2	Policy & Strategy Practices	#5	Recognition of Individual and Team Efforts	4	
		#6	Continuous Development through Learning	9	
		#7	Sustaining Team Effort through Structure-Strategy Alignment	6	19
3	Staff Practices	#8	Process Ownership through Integration	5	
		#9	Staff Satisfaction and Delight	10	
		#10	Professional Development through Promotion of Quality	2	17
4	Resource Practices	#11	Stakeholder Information as a Strategic Resource	4	
		#12	Strategic Marketing Research Information	2	
		#13	Identifying Key Internal and External Performance Indicators	7	13
5	Process Practices	#14	Continuous Process Improvement through Benchmarking	2	
		#15	Process for Management of Risk and Uncertainty	5	
		#16	Establishing a Framework of Core Processes	11	18
6	Student Results Practices	#17	Evaluation of the Quality of Staff-Student Interaction	5	
		#18	Student Satisfaction and Delight	8	
		#19	Creating Synergies in Staff-Student Partnerships	2	15
7	Staff Results Practices	#20	Allocate of Funding in Support of Staff Teaching and Research	8	
		#21	Improving Teaching and Research Infrastructure	4	
		#22	Staff Satisfaction and Delight	6	18
8	Society Practices	#23	Prove Reliable Public Information on Quality and Performance	8	
		#24	Impact of Widening Participation on Teaching Practices	9	
		#25	Society Satisfaction & delight through Economic Regeneration	8	25
9	Key Institutional Results	#26	Aiming for Improvement in Best-in-Class Performance Targets	11	
		#27	Achieving Key Internal and External Stakeholder Results	5	
		#28	Maintain Optimal Mix of Financial and Non-Financial Results	4	20
			TOTAL SCORE i.e. 166 out of 420 points	**166**	**166**
			Total Percentage Score		**39.5%**

Questionnaire Part Three: Microsoft Excel Data Presentation

Appendix B3 presents the responses for all 11 questions in Questionnaire Part Three. With the exception of Questions#4, #5, and #6; the responses to Question#1, #2, #3, #7, #8, #9, #10, and #11 are spilt up into: 11; 9; 7; 11; 2; 4; 14; and 6 parts respectively. Apart from the choice of a fixed alternative, Questions#4, #5, and #6, also requested reasons for choice. For example, the full response for a UK HEI in the post-1992 category is shown in Table 3.3 and Table 3.4, below. The scores represent different scaled responses depending on the variable in the question; for example for Question#1.1, the variable is the strength or 'power of influence' exacted by different stakeholders represented on a 5-point response scale; with 1 = no power, on one extreme; 3 = moderate power; and 5 = great power, at the other extreme.

Table 3.3
Sample Responses for a UK Higher Education Institution in the Post-1992 Category [id =42]
Source: Osseo-Asare Jr., 2003

QN = Questions; Score = represented by different response categories for individual Questions; HE = Higher Education; HEFCE = Higher Education Funding Council for England; QAA = Quality Assurance Agency

QN	Categorisation of Responses	Score	QN	Categorisation of Responses	Score
1.1	Students who pay their own fees	4	7.5	Support-service Staff	5
1.2	Students who do not pay their own fees	4	7.6	Parents who pay Tuition Fees	3
1.3	Academic staff – teaching and research staff	5	7.7	Local Authority	3
1.4	Administrative staff – at chancellery	5	7.8	HEFCE	5
1.5	Support-service staff – buildings	4	7.9	QAA	5
1.6	Parents who pay tuition fees	3	7.10	Potential Employers	4
1.7	Local Authority – city councils	3	7.11	Taxpayers	4
1.8	HEFCE	5	**8.1**	Quality of Teaching and Research	4
1.9	QAA	4	8.2	Flexibility and Reliability of Service Delivery	3
1.10	Potential Employers	3	**9.1**	Quality of Staff Education and Training	5
1.11	Taxpayers	3	9.2	Staff Empowerment and Leadership	5
2.1	Students	4	9.3	Performance Related Reward Systems	3
2.2	Academic Staff	5	9.4	Environmental and Health & Safety Concerns	3
2.3	Administrative Staff	5	**10.1**	Total Quality Strategy (TQS)	5
2.4	Support-service Staff	4	10.2	Human Resource Management Strategy	5
2.5	Parents who pay Tuition Fees	3	10.3	Management of Learning Infrastructure	5
2.6	UK Government	5	10.4	Internal & External Communication Strategy	4
2.7	HEFCE	5	10.5	Collaborative Partnerships	3
2.8	Potential Employers	3	10.6	Internal and External Quality Audit Reporting	4
2.9	Taxpayers	3	10.7	Research Assessment Exercise Scores	4
3.1	Students	5	10.8	Teaching Quality Assessments	4
3.2	Staff	5	10.9	Entry Standards	5
3.3	Parents who pay Tuition Fees	5	10.10	Staff-Student Ratios	5
3.4	UK Government	5	10.11	Facilities Spending	4
3.5	HEFCE	5	10.12	First Class and Second-Uppers	5
3.6	Potential Employers	4	10.13	Graduate Destinations	5
3.7	Taxpayers	4	10.14	Published League Table Positions	3
4	Beneficiaries of the System of HE	1	**11.1**	Equal Opportunity Practices	5
5	Collaborative Partnerships	1	11.2	Impact on local and national Economies	3
6	UK Government Policy and Strategy	1	11.3	Institutional or School's Ethical Behaviour	5
7.1	Students – Undergraduates and Masters	4	11.4	Support for Sports and Leisure	3
7.2	Students – Doctorate	5	11.5	Activities to Reduce and Prevent Pollution	2
7.3	Academic Staff – research active	5	11.6	Disclosure of Information on Sustainability	2
7.4	Administrative Staff	5			

Table 3.4
Sample Responses to Open-Ended Questions for a UK Higher Education Institution of the Post-1992 Category [id = 42]
Source: Osseo-Asare Jr. (2003)

QN = Question

QN	Category Question	Open-Ended Responses and Reasons for Choosing a Fixed Alternative
4	Paying for the Benefits derived from Higher Education	Post-1992 institutions are community based and teaching and learning oriented compared with Pre-1992 institutions, which pride themselves in research excellence, elitism and maintenance of status. This means we tend to sympathise more with students from poorer backgrounds who cannot afford to pay for the full cost of higher education at the economic rate – without Government Funding and Support.
5	Using Profits from Commercial Ventures for Quality Development	This is largely the case in Private Sector Higher Education Institutions, particularly in the USA. In publicly funded institutions if these were to happen on a large-scale; some institutions will benefit more than others, and the Government will become more select in its funding allocations. Yes, it is generally a good thing, if the Government remains the main Funder and Employer of Graduates in the Public Sector.
6	Predictability of Shifts in Government Funding Policy Higher Education	From an economic perspective, decrease in funding will continue to be the policy of successive UK Governments because of the need to control Public Expenditure. However, it might become politically expedient from time to time to relax the policy in order to buy votes from the electorate. For strategic planning purposes, I predict a continuous but stead decline in government funding.

Questionnaire Part Four: Microsoft Excel Data Presentation

Appendix B4 presents the 'quantitative' responses to all the 6 questions contained in Questionnaire Part Four. Questions#3, #4, and #5, in addition to the fixed alternative responses, required respondents to give reasons for their choice of alternative. These reasons for a UK HEI are given below in Table 3.5.

Table 3.5
Sample Responses to Open-Ended Questions for a UK Higher Education Institution of the 'Oxbridge' Category [id = 1]
Source: Osseo-Asare Jr. (2003)

QN = Question

QN	Categorisation of Question	Open-Ended Responses and Reasons for Choosing a Fixed Alternative
3	The strength of the link between Staff Performance Indicators and Staff Reward Systems	The practice in this institution is to continuously strengthen the link between Research Assessment Exercise (RAE) Scores for individual department with individual researcher's career development. In this way we are able to maintain a low staff-turnover. This has led to increased staff satisfaction and low levels of staff complaints.
4	Impact of Widening Participation on Entry Standards	Traditionally we have always maintained a high Entry Standard in order to sustain students' interest and motivation in the study of their choice. We however, have serious difficulties dealing with issues of disability - in this area I think post-1992 institutions are doing better than us.
5	The Perceived Gap Between Entry Standards and Standards of Awards	Our policy of demanding higher Entry Standards have ensured narrowing of the 'Gap'. I personally do not think the same can be said for most post-1992 or modern universities; because they are financially weak, and heavily dependent on the Government; this puts them under enormous pressure to admit diverse range of students, in order to meet government's participation rate targets.

To facilitate analysis, the responses to Question#6 are split up into two groups - the first group of 20 on academic performance indicators and the second group of 5 on administrative performance indicators. For instance, the responses for all 6 questions for a UK HEI in the 'oxbridge' category are presented in Table 3.6, below.

Table 3.6
Sample Responses for a UK HEI in the 'Oxbridge' Category [id = 1]
Source: Osseo-Asare Jr. 2003

RESPONSES TO QUESTIONS: 1 – 5 QN = Question

QN	Description of Responses	Score
1	Relevance of Performance Measures in Assessing Individual and Institutional Performance	3
2	The Usefulness of Performance Indicators in Assessing Individual and Institutional Performance	2
3	The Practice of Linking Staff Performance Indicators and Staff Reward Systems	2
4	The Impact of Widening Participation Agenda on Maintenance of High Entry Standards	2
5	The Gap Between Entry Standards and Standards of Awards	3

Table 3.6 - CONTINUED
Sample Responses for a UK HEI in the 'Oxbridge' Category [id = 1]
Source: Osseo-Asare Jr. 2003

RESPONSES TO QUESTION: 6

FTE = Full Time Equivalent; QN = Question; Score = importance score + effectiveness score in absolute terms or in percentages; e.g. for Question: 6AC.1, the Score is either '4'as below or '40%' as in Table 7.7.

QN	Description of Responses	Score	QN		Score
	ACADEMIC AREAS			**ADMINISTRATIVE AREAS**	
6AC.1	Cost Per Full-Time Equivalent Students	4	6AD.1	Administrative Costs Per FTE Student	6
6AC.2	Research Income	8	6AD.2	Premise Costs Per FTE Student	6
6AC.3	Research Assessment Exercise Score	10	6AD.3	Library Costs Per FTE Student	6
6AC.4	Quality Assurance Exercise Score	5	6AD.4	Careers Service Costs Per FTE Student	6
6AC.5	Submission Rates for Research Degrees	9	6AD.5	Support Staff-Academic Staff Ratio	6
6AC.6	Number of Sponsored Research Students	10			
6AC.7	Occupation of Graduates after 1-5 years	6			
6AC.8	Full-Time Staff to FTE Students	4			
6AC.9	Equipment Costs per Full-Time Academic Staff	4			
6AC.10	Membership of Research Councils	4			
6AC.11	Peer Review	8			
6AC.12	Number of Research Publications	8			
6AC.13	Staff Participation in Improvement Teams	2			
6AC.14	Staff Absenteeism and Sickness Levels	2			
6AC.15	Staff Turnover	6			
6AC.16	Number of staff/student Complaints	6			
6AC.17	Number of Press Coverage	2			
6AC.18	Number of Accolades and Awards Received	6			
6AC.19	Partnerships with Local Authorities	2			
6AC.20	Sharing of Best Practices and Knowledge	6			

Questionnaire Part Five: Microsoft Excel Data Presentation

Appendix B5 presents the 'quantitative' responses to all 7 questions on a Microsoft Excel spreadsheet format. However, Table 3.7 below, presents a sample of these 'quantitative' responses for a UK HEI in the post-1992 category i.e. id = 42 on the list of participating institutions. Questions#1, #3, #4, #5, and #7, require respondents to either list other alternative responses not listed or give reasons for their choice of alternative responses. These reasons for a sample of these 'qualitative' responses is presented in Table 3.8 below, for the same post-1992 institutions [id = 42].

Table 3.7
Sample Responses for a Post-1992 Higher Education Institution [id = 42]
Source; Osseo-Asare Jr., 2003

QN = Question; HEFCE = Higher Education Funding Council for England; QAA = Quality Assurance Agency

QN	Description of Responses	Score
1	Selected Areas for Integration	5
2	Evaluating the Possibility and Feasibility of Integrating Different Areas in Higher Education	18
3	Satisfying the Needs and Expectations of External Funding Bodies e.g. QAA, HEFCE	1
4	Ranking of Leaderships and Processes	3
5	Ranking of Quality Management Premises on Leadership, Processes, and Funding	1
6	Identifying Critical Success Factors for Sustaining Continuous Quality and Performance Improvement	7
7	Appropriateness of Pictorial Representation of Higher Education Quality Model Structures	4

Table 3.8
Sample Responses to Open-Ended Questions for a UK Higher Education Institution in the 'Post-1992' Category [id = 42]
Source: Osseo-Asare Jr. (2003)

QN = Question

QN	Categorisation of Question	Open-Ended Responses and Reasons for Choosing a Fixed Alternative
1	Possible Areas for Integration	All three areas are critical to sustaining Academic Quality Improvement i.e. Academic, Administrative, and Support-Service Areas.
3	Criticality in Meeting the Needs and Expectations of the QAA and HEFCE	It is obligatory to meet these needs in order to sustain continuous cash flow into operational activities such as teaching and learning. It is very critical in post-1992 institutions with fewer independent sources of funding.
4	Sustainable Critical Success Factors	Leadership and Processes on their own are not effective in bringing about and sustaining quality improvement. They are more effective when integrated, and in situations where the process is owned by a leader, improved leaderships brings about improved processes and the delivery of quality teaching and research.
5	Premise underpinning Models for Sustaining Quality Improvement	Leadership, Core Processes and Level of Funding, must be available simultaneously, in order to achieve sustainable improvement. It is an organic rather than a mechanistic relationship.
7	Pictorial Representation of Proposed Models for Higher Education	Use of appropriate terminology is important; and it ought to be simple to understand yet capturing all the symbolic academics and administrators are familiar with, not a wholesale transfer from industry and commerce.

B. Presentation of Transcripts of Audio-Taped Semi-Structured Interviews

A total of 39 interviews were conducted, 21 in the United Kingdom and 18 in the United States of America, in support of the Questionnaire Survey. The 39 interview transcripts are stored on floppy disks and hard copies, and are available for inspection - as part of the doctoral research data management strategy - a sample transcript is presented under Appendix B6. To ensure transcription quality, the transcripts are a 'verbatim facsimiles' of what was said at the interview, reflecting a bias towards a critical realist's ontology evident in qualitative research (Poland, 2002:630). The assumption is that the translation from audiotape into textual data is not inherently problematic, so long as careful attention is given, to ensure accuracy of transcription i.e. transcription quality. For effective data management, the interview transcripts are presented in a report format showing: *a title page; executive summary; contents page; list of interview themes; list of broad and specific interview questions; the actual responses; list of references, bibliographical notes and recommended reading; and appendices.* Table 3.9 provides a list of interview transcripts of UK and US interviewees.

Table 3.9
List of Semi-Structured Expert Interviews Conducted
Source: Osseo-Asare Jr. (2003)

UK Interviews		US Interviews	
No.	Experts	No.	Experts
1	Professor John Brennan	1	Professor Christopher Brown
2	Professor Maurice Kogan	2	Professor Robert McGrath
3	Professor Allan Norcliffe	3	Professor Ingrid Blood
4	Professor Keith Harrison	4	Professor Russell Barton
5	Professor Mohammed Zairi	5	Professor David Christy
6	Professor Samuel Ho	6	Professor Louise Sandmeyer
7	Professor Laura D'Andrea Tyson	7	Professor William Asbury
8	Dr David Scott	8	Dr. Michael Dooris
9	Dr. John Davies	9	Dr. Carol Everett
10	Dr. Everard van Kemenade	10	Dr. Dan Nugent
11	Mr. Duncan McCallum	11	Dr. Bob Barlock
12	Mr. Barry Blackham	12	Dr. Ann Dodd
13	Mr. Mike Pupius	13	Dr. Janis Jacobs
14	Mr. Sean McCartney	14	Dr. Renata Engel
15	Miss Tarla Shah	15	Dr. Robert Cornwall
16	Miss Carol Steed	16	Dr. Mike DiRaimo
17	Mr. Ted Knight	17	Dr. Barbara Sherlock
18	Mr. Bill Murphy	18	Dr. John Barron
19	Mr. John Swanwick		
20	Miss Nicole Achermann		
21	Mr. Ali Nasaralla		

3.1.2. Secondary Data Presentation

Table 3.10 below, presents a list of documentary evidence in support of quality management practices in the UK HEIs under study; because these documents are in very large volumes, they are not presented directly as part of this thesis, but stored manually in files for later analysis. Key findings from analysing these secondary data will be incorporated into and commented on in Chapters Four and Five on discussion of empirical results and interpretation of findings respectively. These documents are available for inspection by supervisors and external examiners.

Table 3.10
List of Documentary Evidence of Practice Representing Secondary Data Received from Respondents and Interviewees
Source: Osseo-Asare Jr. (2003)

No. = Number; HEIs = higher education institutions, including institutions not listed in the sample under study; RAE = Research Assessment Exercise;

No.	Description of Contents of Documents	No. of HEIs	Periods Covered
1	Subject Review Reports	50	1995-2000
2	Continuation Audit Reports	70	1996, 2000
3	Response to Recent Proposal for Research Assessment Exercise (RAE) Reform	80	2003
4	Websites Documents on Institutional Quality Development Strategies	67	2000-2003
5	English Funding Allocations	111	2002-2006

Summary of Data Presentation

This chapter presented both primary and secondary quantitative and qualitative data using 'tabulation' as the basic data presentation technique, which is an integral part of SPSS and Microsoft Excel software. The primary quantitative and qualitative data were collected using Questionnaires and Semi-structured interviews as research instruments. The 'evidence of practice' contained in several documents - listed in Table 3.10 above - was the main source of secondary quantitative and qualitative data. For each part of the Questionnaire a sample data set for a particular UK higher education institution was given to illustrate the mix of data available for subsequent analysis. The primary quantitative and qualitative data generated by the responses to the five-part Questionnaires covered the five research themes below:

- *Best Practices for Academic Excellence in participating UK Higher Education Institutions*
- *Evaluation of Best Practices in UK Higher Education*
- *Stakeholders in UK Higher Education*
- *Performance Management in UK Higher Education*
- *Development of an Alternative Excellence Model for UK Higher Education*

The interview transcripts from the UK and US generated qualitative and quantitative data. The transcripts are kept on floppy disks supplemented by hard copies kept manually in files in readiness for a step-by-step inductive analysis. As expected the responses to the interview questions relate to the five research themes used in the design of the questionnaires.

Sub-section [3.2] provides a comprehensive analysis of the quantitative and qualitative empirical data presented here. The purpose for separating data presentation and data analysis was to help facilitate audit trail of the large volume of primary and secondary data collected over the three-year period of the doctoral research study. It is also consistent with the strategy for effective management of research data, and to make future retrieval of stored data easier.

3.2

Analysis of Quantitative and Qualitative Empirical Research Data

"Virtually all research will involve some numerical data or contain data that could usefully be quantified to help you answer your research question(s) and to meet your objectives...and can be a product of all research strategies" (Saunders et al., 2003:327)

This section provides a detail analysis of the quantitative and qualitative empirical data presented earlier in Section [3.1]. First, the primary quantitative data are subjected to simple statistical analysis involving the use of the spreadsheet formats contained in the Statistical Package for the Social Sciences (SPSS) version 10 for Windows and Microsoft Excel software. Second, it shows the use of simple inductive technique of 'coding' in the analysis of the qualitative data obtained from the questionnaires responses and interview transcripts.

Primary Data Analysis Methods

Most writers including Burgess (1984:166), Churchill (2000) and Saunders et al. (2000:387) believe a simultaneous or concurrent process of data collection and analysis will help shape the direction of data collection and allow the researcher to recognise important themes, patterns and relationships as he or she collects the data. This enabled this researcher to re-categorise existing data to see whether these themes, patterns and relationships were present in the data already collected. As a consequence, appropriate adjustments were made to subsequent data collection approaches (Strauss and Corbin, 1998). The concurrent process also enabled this researcher to develop sets of notes, make entries into journals and diaries, and generate sets of interview transcripts, as recommended by many researchers such as Burgess (1984:166). According to Easterby-Smith et al. (1991) the implications of a concurrent process make it necessary for the researcher to arrange interviews with enough time between them. They suggested this allows sufficient time to write up or type in a transcript or set of notes, and to analyse them before proceeding to the next data collection session. The methodological similarities between grounded theory and

schema analysis was employed in the collection and analysis of data. The interview transcripts were read carefully with the aim of discovering and linking themes into theoretical or conceptual models, as recommended by Ryan and Bernard (2000:784).

Using SPSS Version 10 for Windows

This doctoral research study used the spreadsheet format contained in the SPSS software to analyse some of the responses to questionnaire questions demanding a choice of a 'fixed alternative response'. Typically, these were the 'YES', 'NO' or 'DO NOT KNOW' type of questions. SPSS version 10 for windows was the version installed on the University of Derby Network system during the period of this study.

Using Microsoft Excel Version 2000 for Windows

Some of the questionnaire questions demand 'scaled responses' which generate vital performance related statistics; for instance all the 28 questions in Questionnaire Part Two on Evaluation of Best Practices. The responses to some of the 'closed' question will also be analysed using a Microsoft Excel where appropriate. The *reasons* for the responses would however, be analysed *qualitatively* i.e. inductively by selecting a paragraph - representing a *'chunk of text'* - as the basic unit of analysis; this is recommended by Ryan and Bernard (2000:780) and is explained in detail below.

Using Inductive Methods of Analysis

The transcripts of the 39 audio-taped semi-structured interviews were inductively analysed. According to Ryan and Bernard (2000:780), *Coding* is central to *whole-text analysis*, because it forces researchers of any philosophical persuasion to make judgements about the meanings of contiguous blocks of *text*. Miles and Huberman (1994:56) say simply, *"coding is analysis"*, and coding is supposed to be data reduction, not proliferation (Miles, 1979:593-594). For the purpose of the doctoral study, the following tasks – suggested by Ryan and Bernard (2000) – are being associated with the coding process: sampling, identifying themes, building code books, marking texts, constructing models (relationships among codes), and testing these models against empirical data.

The inductive process for analysing the interview transcripts is described as follows. First, this researcher identifies and defines a sample or '*corpus*' of text as the response to a question asked during the interview. The *basic units of analysis* within the

defined sample are then non-randomly selected. According to Ryan and Bernard (2000:780), the basic units of analysis may be: (1) *entire texts* – interviews, responses to open-ended questions (2) *grammatical segments* – themes, paragraphs, sentences, words (3) *formatting units* – pages, rows, columns or (4) *chunks of text* reflecting a single theme – thematic units. This researcher's basic units of analysis is a 'paragraph' representing *'chunks of text within a grammatical segment'* in the interview transcript - reflecting a *theme* - what Pool (1959) and Krippendorf (1980:62) call *'thematic'* units of analysis.

Second, starting with some *general themes* derived from the literature *more themes* and *sub-themes* were added after close reading of the *textual data* from the interview transcripts, as suggested by Willms et al. (1990) and Miles and Huberman (1994). *Themes* are abstract constructs that researchers identify before, during and after data collection (Ryan and Bernard, 2000:780). The themes identified before the data collection come from literature reviews and from this researcher's own experiences with the subject matter (Bulmer, 1979). More *themes* were *induced* from the text itself, during and after the data collection. To *induce themes*, *grounded theorists* suggest a careful, line-by-line reading of the text while looking for processes, actions, assumptions, and consequences. Spradley (1979:199-201) suggests looking for evidence of social conflict, cultural contradictions, informal methods of social control, things that people do in managing impersonal social relationships, methods by which people acquire and maintain achieved and ascribed status, information about how people solve problems. Since the views of respondents and interviewees are likely to change over the 3 to 5 year duration of a longitudinal study, this researcher continuously introduced new codes or sub-codes to represent new themes.

Thirdly, the selected codes were assigned to the 'paragraph' i.e. the basic unit of analysis being analysed. In this research study, these codes were initially, used as *tags* for general identification of *text* and not associated with any fixed unit of text (Ryan and Bernard, 2000:782); and later, as *values* to specifically mark off fixed units of text for later retrieval or indexing (Seidel and Kelle, 1995). According to Ryan and Bernard (2000:782), codes as *'tags'* serve as general tagging device normally associated with *grounded theory* and as *'values'* they are used specifically to mark text as in *content analysis*.

3.2.1. Quantitative and Qualitative Analysis of Responses to Questionnaires

56 out of 112 Questionnaires were returned, representing 50% response rate, which is the upper-limit of the 30-50% range deemed reasonable for Hand-delivered Questionnaires by Witmet et al. (1999), Dillman (2000), and Saunders et al. (2003:284). Debatably, however, the response rate may be considered by some as relatively low if attempts are made to generalise the findings of this research to a much larger population. The responses to 42 out of the 56 returned Questionnaires were analysed, excluding the 14 Questionnaires, which were unsatisfactorily completed with serious omissions and judgements of error.

A. Quantitative Analysis of Responses to Questionnaires

The quantitative analysis is in the order in which the primary data have been presented earlier in Section [3.1] and Appendix B1 to B5. That is Questionnaire Part One, Appendix B1; Questionnaire Part Two, Appendix B2; Questionnaire Part Three, Appendix B3; Questionnaire Part Four, Appendix B4, and Questionnaire Part Five, Appendix B5.

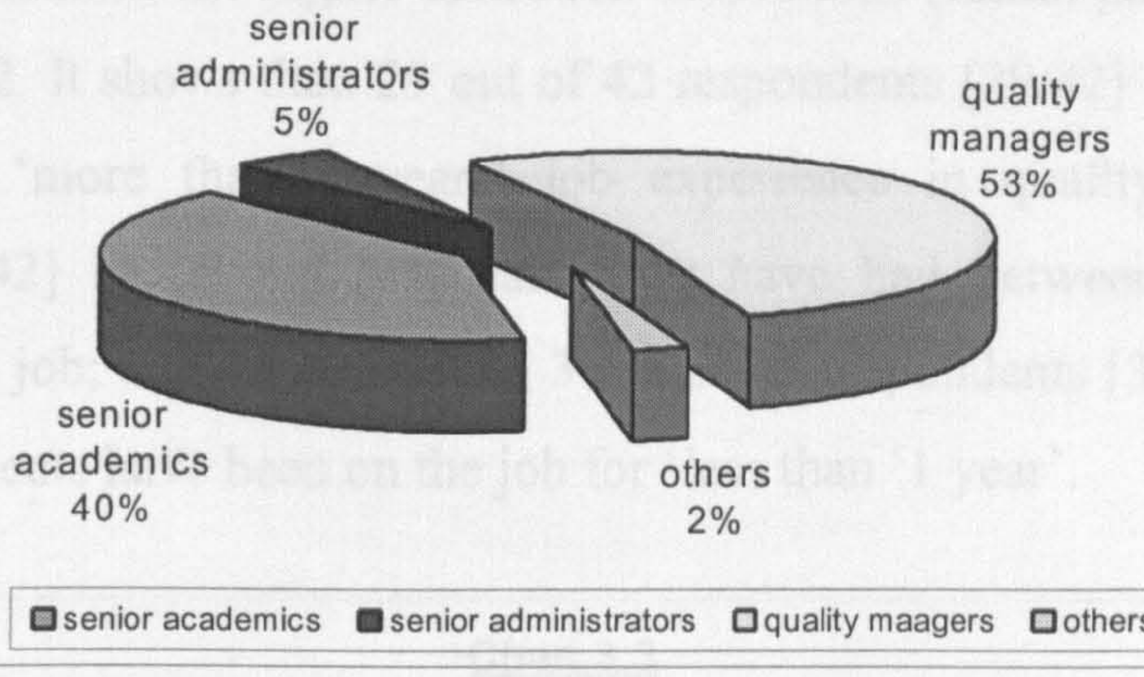
Quantitative Analysis of Questionnaire Part One

The SPSS Data Presentation in Appendix B1 shows the 'fixed alternative responses' for Questions: q1, q2, q3, q4, q5, q6, q7, q9, q11, and q17; which are all analysed below; but not for q8, q10, q12, q13, q14, q15, and q16. Where the symbol 'q' represents 'question'. Questions: q8 and q10 are analysed latter under Qualitative Analysis; and Questions: q12 to q16 are analysed later below under Questionnaire Part Four.

Question: q1 – fixed alternative responses
Job Position within a Formal Structure for Quality Management

Chart 3.1 below, presents the SPSS analysis of the responses to this question from 42 respondents i.e. [N = 42], drawn from the participation higher education institutions. Chart 3.1 shows that: 17 out of 42 respondents [17/42] i.e. about 40% were Senior Academics who were either involved in teaching and/or research, with responsibility for Academic Quality. 2 out of 42 respondents [2/42] i.e. about 5% were Senior Administrators; [22/42] i.e. about 53% were Quality Managers. The remaining [1/42] i.e. about 2% were a part of a team of academics and/or administrators with temporary responsibility for QAA and/or HEFCE and other quality matters.

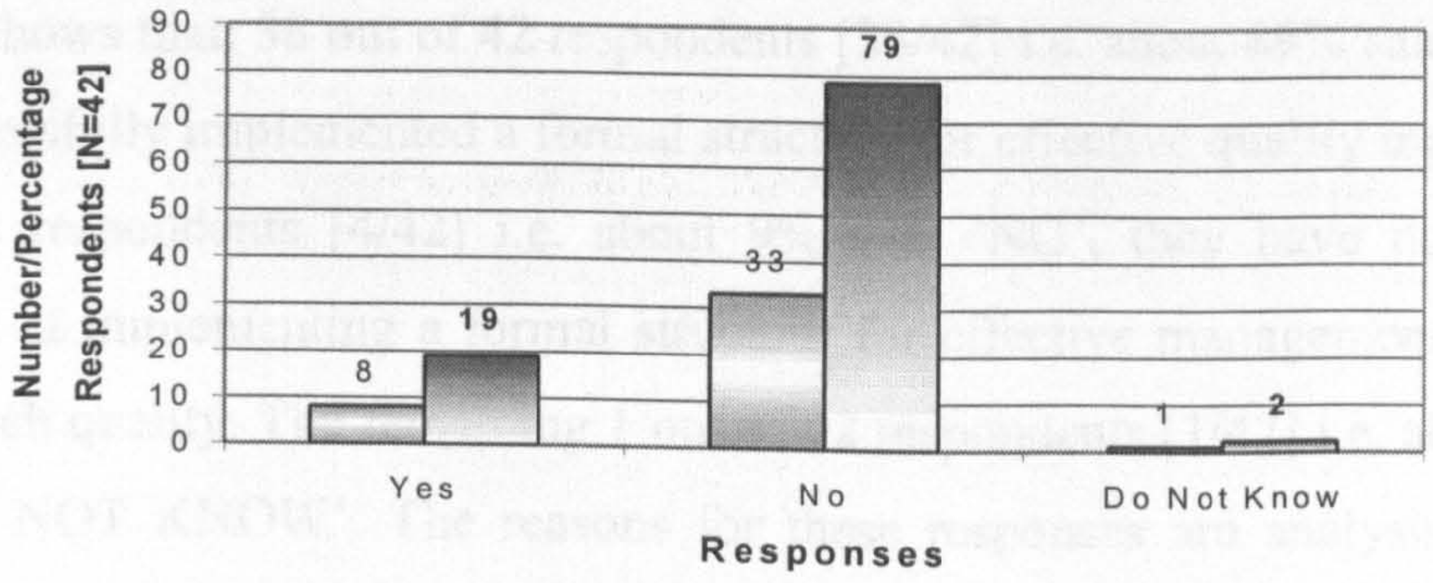
Chart 3.1
Job Positions for Staff Responsible for Quality
(Source: Based on Questionnaire Part One - Question #1)



Question: q2 – fixed alternative responses
Documentary Evidence of Job Description in Support of Job Position

Chart 3.2 below, presents the SPSS analysis of the responses from 42 respondents i.e. N=42. It shows that: [8/42] i.e. about 19% said 'YES' they have a formal written Job Description in support of their Job Position in Quality Management; [33/42] i.e. about 79% said 'NO', they do not have a formal written Job Descriptions, but had other informal written and verbal arrangements, in support of the responsibility for quality improvement; and the remaining [1/42] i.e. about 2% said they 'DO NOT KNOW' whether they is a formal or informal evidence relating to their responsibility. The implications of these responses for quality management in higher education will be dealt with in Chapters Four and Five.

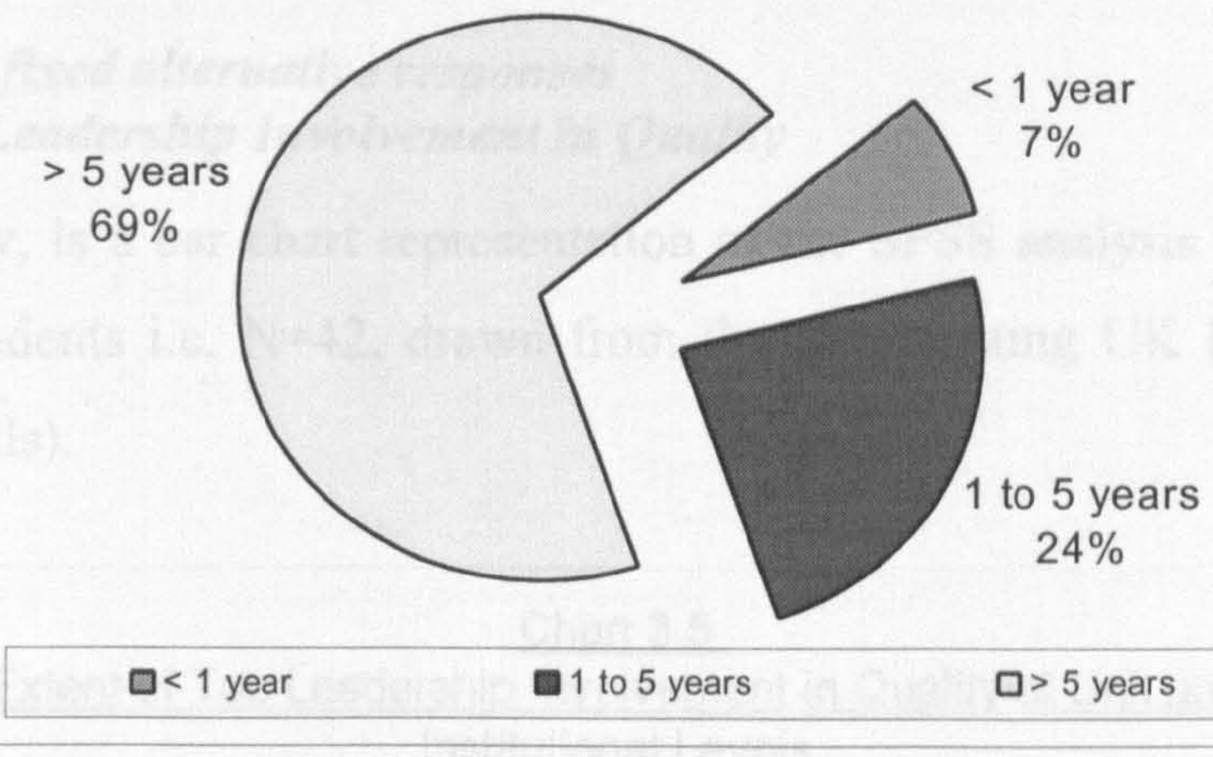
Chart 3.2
Evidence of Job Description for Formal Job Position
(Source: Based on Questionnaire Part One - Question #2)



Question: q3 – fixed alternative responses
Number of Years Experience in the Area of Academic Quality

Chart 3.3 below, is a pie chart representing the SPSS analysis of the responses from the 42 respondents from the higher education institutions (HEIs) participating in this research i.e. N=42. It shows that: 29 out of 42 respondents [29/42] i.e. about 69% of respondents had 'more than 5 years' job experience in quality; 10 out of 42 respondents [10/42] i.e. about 24% said they have had between '1 to 5 years' experience on the job; and the remaining 3 out of 42 respondents [3/42] representing about 7% respondents have been on the job for 'less than '1 year'.

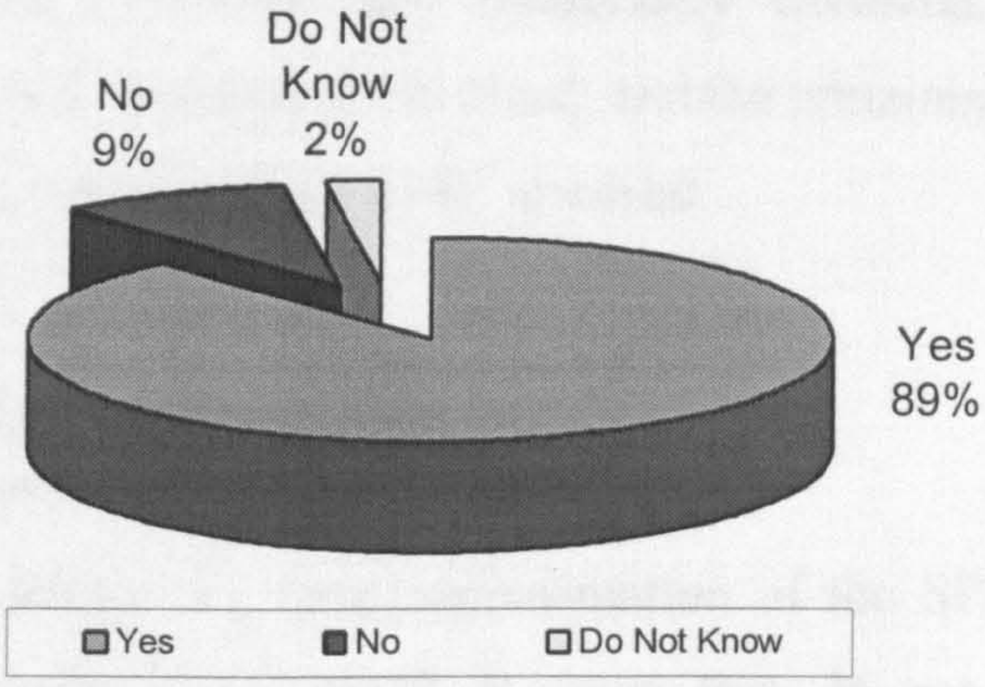
Chart 3.3
Number of Years Education and Training in Academic Quality Management
(Source: Based on Questionnaire Part One - Question #3)



Question: q4 – fixed alternative responses
Successful Implementation of Formal Structures for Quality Management in UK Higher Education Institutions

Chart 3.4 below, presents the SPSS analysis of the responses from 42 respondents i.e. N=42. It shows that: 38 out of 42 respondents [38/42] i.e. about 89% said 'YES' they have successfully implemented a formal structure for effective quality management. 4 out of 42 respondents [4/42] i.e. about 9% said 'NO', they have not been very successful at implementing a formal structure for effective management of teaching and research quality. The remaining 1 out of 42 respondents [1/42] i.e. about 2% said they 'DO NOT KNOW'. The reasons for these responses are analysis later under qualitative data analysis.

Chart 3.4
Successful Implementation of Formal Structures for Quality Management
(Source: Based on Questionnaire Part One - Question #4)



Question: q5 – fixed alternative responses
Extent of Top Leadership Involvement in Quality

Chart 3.5 below, is a bar chart representation of the SPSS analysis of the responses from 42 respondents i.e. N=42, drawn from the participating UK higher education institutions (HEIs).

Chart 3.5
Extent of Top Leadership Involvement in Quality at Unit and Institutional Levels
(Source: Based on Questionnaire Part One - Question #5)

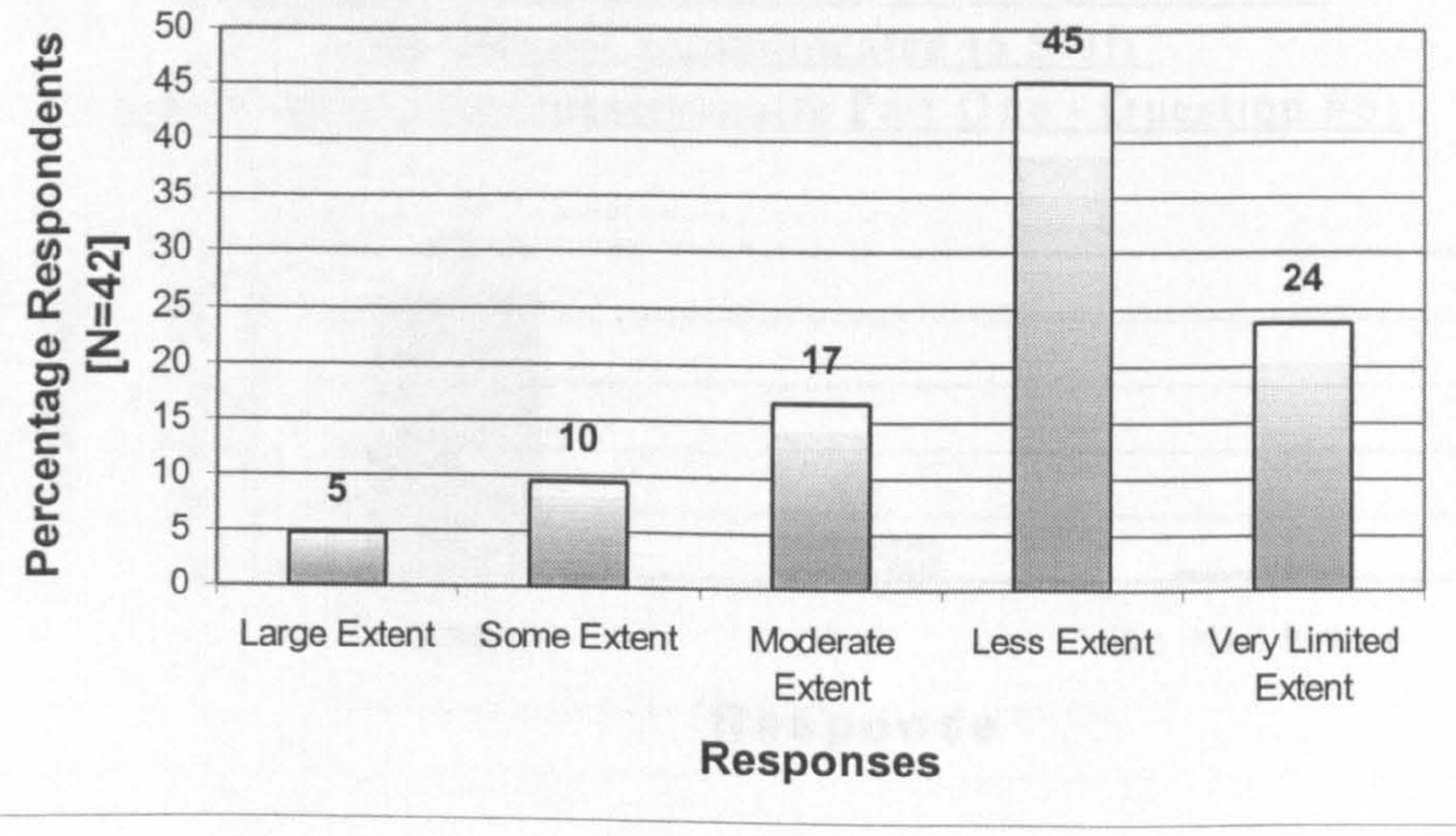
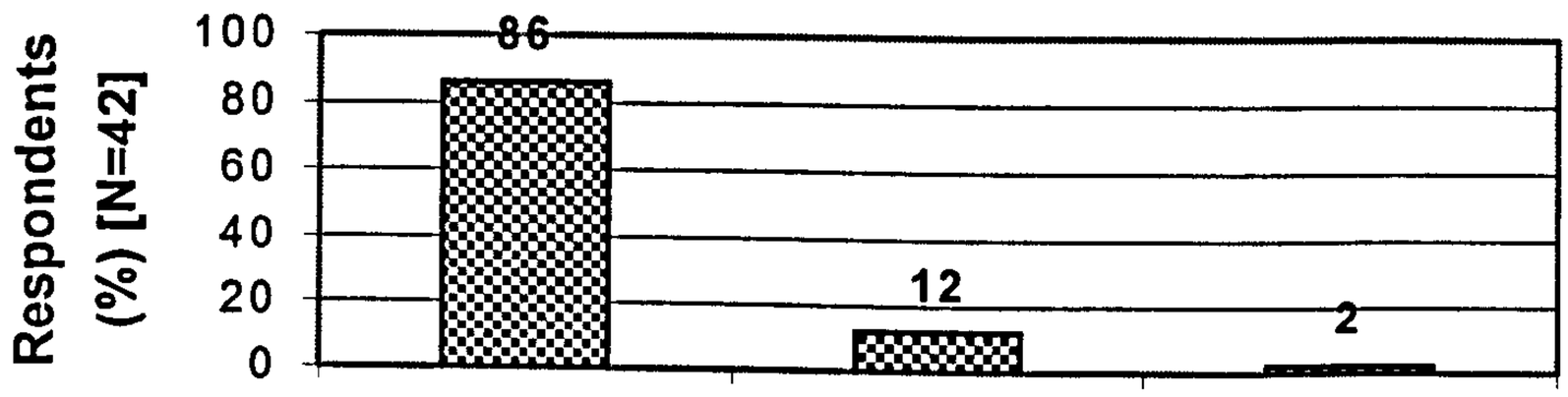


Chart 3.5 shows that: [2/42] i.e. about 5% said they were to a 'large extent personally and actively involved' in efforts to improve quality at both the unit i.e. departmental level and institutional level. [4/42] i.e. about 10% said they were involve to 'some extent'; [7/42] i.e. about 17% were only 'moderately' involved. [19/42] i.e. about 45% respondents were to a 'less extent' involved; and the remaining [10/42] i.e. about 24% said they were to a 'very limited extent' involved.

Question: q6 – fixed alternative responses
Effectiveness of Internal Communication Infrastructure

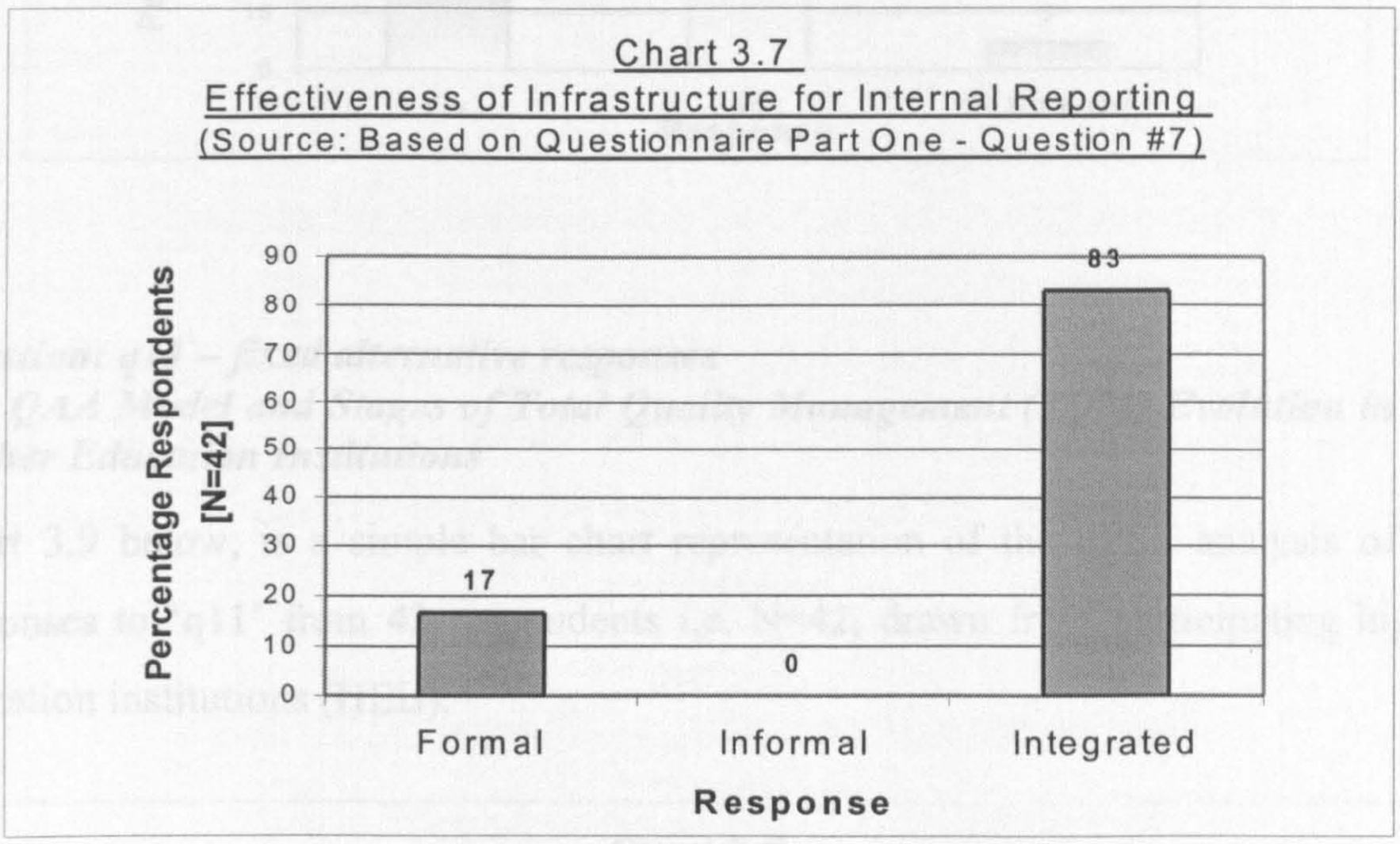
Chart 3.6 below, is a simple bar chart representation of the SPSS analysis of the responses from 42 respondents i.e. N=42. It shows that, 36 out of 42 respondents [36/42] - representing about 86% respondents - said 'YES' procedures and results of teaching and research quality assessment are effectively communicated at all levels of the institution. This relates to procedures and results of Teaching Quality Assessment (TQA) and Research Assessment Exercises (RAE). 5 out of 42 respondents [5/42] representing about 12% respondents said 'NO', they do not think procedures and results are effectively communicated to all staff at all levels; and only 1 out of 42 respondents [1/42] i.e. about 2% responded 'DO NOT KNOW'. The reasons for these responses are analysis later under qualitative data analysis using inductive techniques.

Chart 3.6
Extent to Which TQA Procedures and Results are Effectively Communicated to Staff
(Source: Based on Questionnaire Part One - Question #6)



Question: q7 – fixed alternative responses
Effectiveness of Infrastructure for Internal Reporting

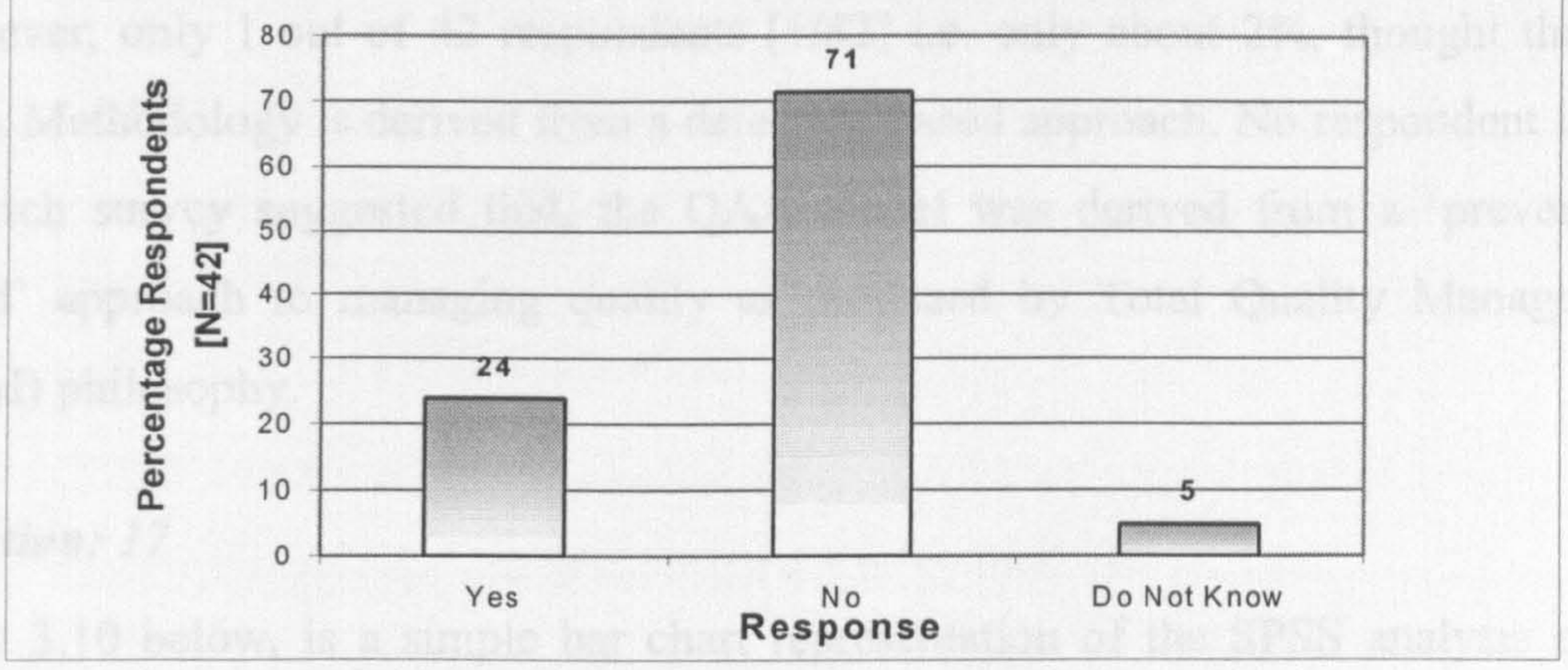
Chart 3.7 below, presents the SPSS analysis of the responses from 42 respondents i.e. N=42. It shows that: [7/42] respondents i.e. about 17% said they had a 'formal structure' for effective internal reporting; [0/42] none i.e. 0%, implying none of the respondents indicated they had an 'informal structure'; however, a massive [35/42] i.e. about 83% responded they had an integrated reporting infrastructure which makes used of both 'formal' and 'informal' structures.



Question: q9 – fixed alternative responses
Impact of QAA/HEFCE Methodology on Teaching and Research Quality Management

Chart 3.8 below, is a simple bar chart representing the SPSS analysis of the responses from 42 respondents i.e. N=42. It shows that, 10 out of 42 respondents [10/42] i.e. about 24% said 'YES' QAA and HEFCE quality improvement requirements relating to Teaching Quality Assessment (TQA) and Research Assessment Exercises (RAE) processes, have brought about real improvement in academic quality. [30/42] i.e. 71%, said 'NO', the processes have not brought about real quality improvement. The remaining [2/42] i.e. about 5% responded they 'DO NOT KNOW'. The reasons for these responses are later analysed under qualitative data analysis using inductive techniques.

Chart 3.8
Extent to Which TQA and RAE Processes Have Delivered Real Quality Improvement
(Source: Based on Questionnaire Part One - Question #9)



Question: q11 – fixed alternative responses
The QAA Model and Stages of Total Quality Management (TQM) Evolution in UK Higher Education Institutions

Chart 3.9 below, is a simple bar chart representation of the SPSS analysis of the responses to 'q11' from 42 respondents i.e. N=42, drawn from participating higher education institutions (HEIs).

Chart 3.9
Stages of Evolution of the QAA Model
(Source: Based on Questionnaire Part One - Question #11)

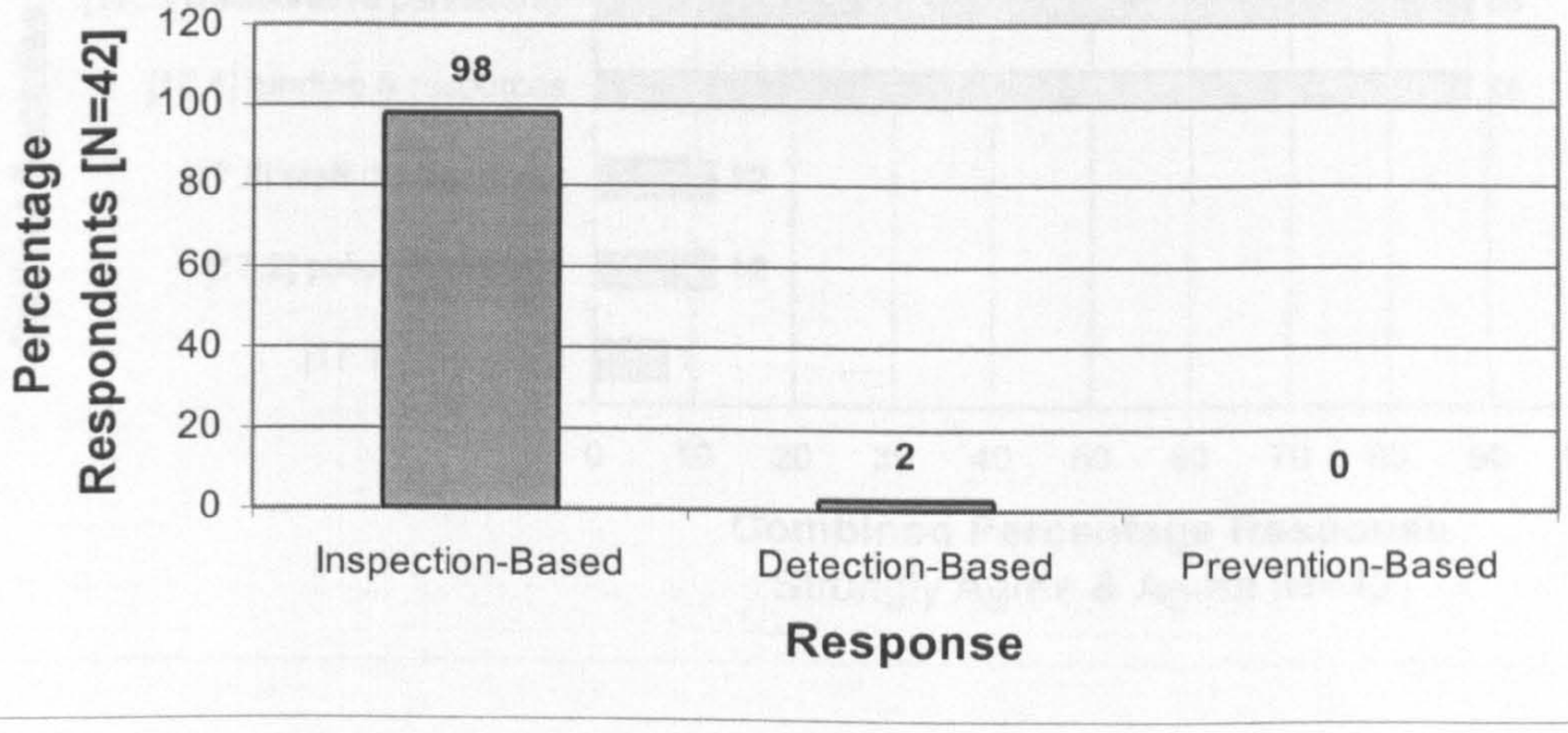
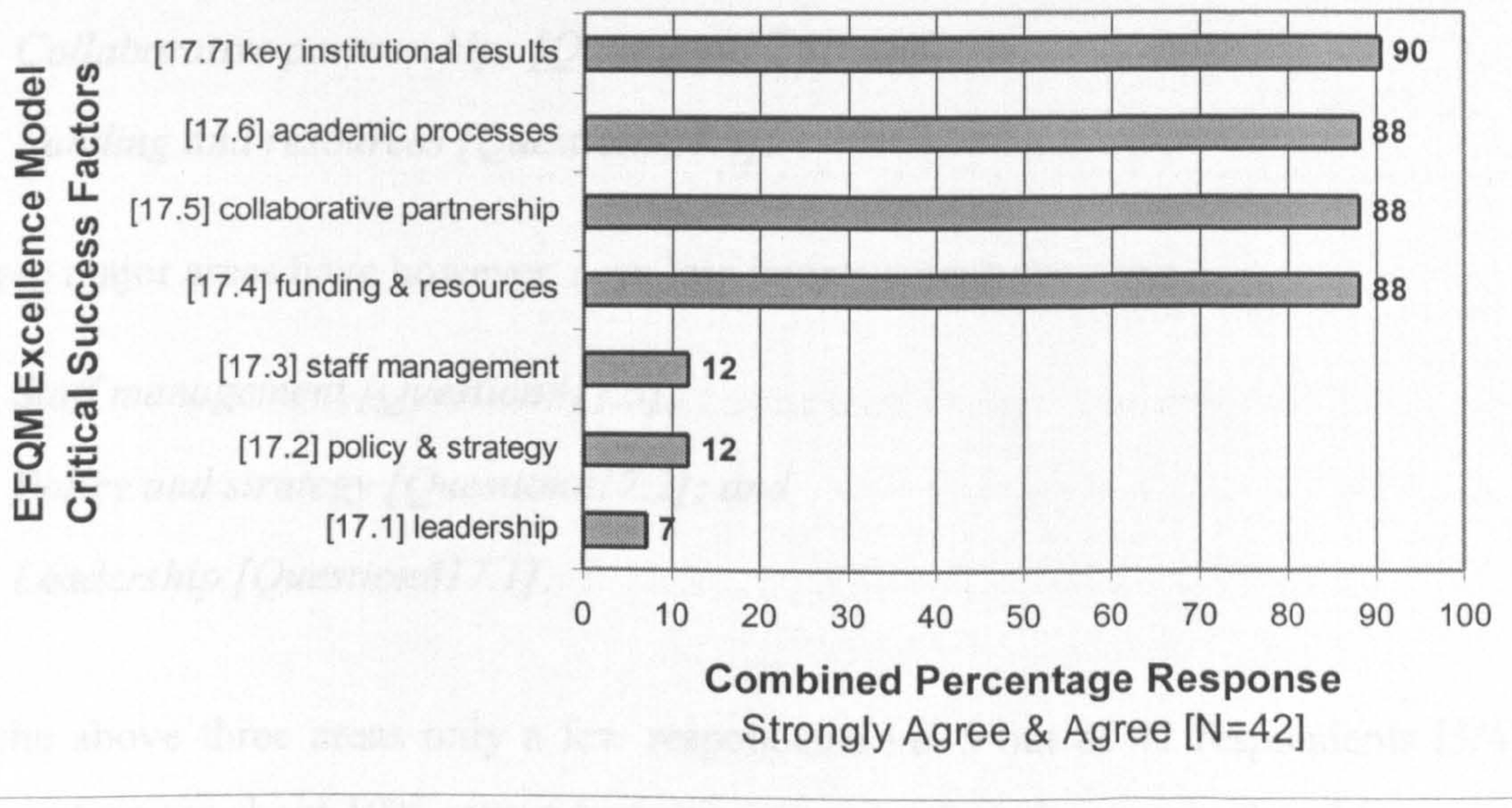


Chart 3.9 shows that, majority of respondents i.e. 41 out of 42 respondents [41/42] or approximately 98% thought that UK's Quality Assurance Agency (QAA) Model for assuring quality, represents an 'inspection-based' approach to quality management. However, only 1 out of 42 respondents [1/42] i.e. only about 2%, thought that the QAA Methodology is derived from a detection-based approach. No respondent in this research survey suggested that, the QAA model was derived from a 'prevention-based' approach to managing quality as proposed by Total Quality Management (TQM) philosophy.

Question: 17

Chart 3.10 below, is a simple bar chart representation of the SPSS analysis of the responses to question 'q17' from the 42 respondents i.e. N=42. It assesses the extent to which QAA and HEFCE Teaching Quality Assessment (TQA) and Research Assessment Exercise (RAE) impact on internal quality management critical success factors - represented here by the EFQM Excellence Model Enabler Criteria and other factors prevailing in UH HEIs.

Chart 3.10
Impact of TQA and RAE on EFQM Excellence Model Critical Success Factors
(Source: Based on Questionnaire Part One - Question #17)



The responses in Chart 3.10 above relate to seven management performance areas:

- ***LEADERSHIP*** for continuous improvement;
- ***POLICY AND STRATEGY*** for quality improvement;
- ***STAFF MANAGEMENT*** for quality and performance improvement;
- ***FUNDING AND OTHER RESOURCES*** for teaching and research quality improvement;
- ***COLLABORATION AND PARTNERSHIPS***;
- ***CORE PROCESSES*** for quality and performance improvement; and
- ***INSTITUTIONAL PERFORMANCE RESULTS*** including students and stakeholder results.

Chart 3.10, shows that, majority of respondents i.e. 37 out of 42 respondents [37/42], representing about 89% on average 'strongly agree' and 'agree' that both Teaching Quality Assessments (TQA) and Research Assessment Exercises (RAE) together have significantly brought about improvement in some areas, but not in others. From Chart 3.10, it can be seen that, 'four' main areas have seen significant improvements, these are:

- *Key institutional results [Question#17.7];*
- *Academic processes [Question#17.6];*
- *Collaborative partnerships [Question#17.5]; and*
- *Funding and resources [Question#17.4].*

Three major areas have however, seen less improvement; they are:

- *Staff management [Question#17.3];*
- *Policy and strategy [Question#17.2]; and*
- *Leadership [Question#17.1].*

In the above three areas only a few respondents i.e. 5 out of 42 respondents [5/42] accounting for about 10% respondents on average, 'strongly agreeing' and 'agreeing' to have observed significant improvement in quality management practices required to sustain teaching and research quality improvement.

Quantitative Analysis of Questionnaire Part Two

Numerical or 'quantitative' primary data is represented here by the 'scores' obtained from the evaluation of a set of 28 quality management practices in terms of their relative 'importance' and relative 'effectiveness' in delivering significant improvement in quality and performance. The number of respondents and the corresponding percentage scaled responses are presented for each practice.

The works of Blazey (1997) and Zairi (2000a) were based on the assumption that a functional relationship exists between the two evaluation criteria used in Questionnaire Part Two i.e. 'importance' or efficiency and 'effectiveness'. This suggests that, a bivariant analysis can be used to determine the strength of association between respondents' perceptions of the degree of 'importance' of a quality management practice and the degree of 'effectiveness' of the practice, by calculating 'three' statistics:

- *First, the Pearson product-moment correlation coefficient (r) using the numerical 'percentage' response scores for the two variables, and adopting the modified version of Fink's (1995c:34-35) formula below:*

$$\mathbf{r} = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}}$$

where:

r = Pearson product-moment correlation coefficient;
i = relative importance score (RIS) percent;
e = relative effectiveness score (RES) percent;
$\bar{i}$ = sample mean for RIS -score, sample size (n = 42 respondents);
$\bar{e}$ = sample mean for RES -score, sample size (n = 42 respondents);

- *Second , the Coefficient of Determination* ***(r^2)***

- *Third, test statistics: The statistical significance of the relationship between the degree of 'importance' **(i)** and degree of 'effectiveness' **(e)** of a quality management practice as measured by the product-moment coefficient **(r)** and the coefficient of Determination **(r^2)** above, is conveniently tested using a two-tailed test **'t'** statistic with degrees of freedom **(n - 2)** and level of significance i.e. alpha value **(α) = 0.05.***

The hypotheses are:

$$H_o: \rho = 0$$

$$H_1: \rho \neq 0$$

Where:

H_o *= the null hypothesis i.e. for each quality management practice under study there is no linear relationship between the degree of 'importance' and the degree of 'effectiveness'.*

H_1 *= the alternative hypothesis i.e. for each quality management practice under study, there is a positive or negative linear relationship between the degree of 'importance' and the degree of 'effectiveness'.*

ρ = represents an estimate of the coefficient of determination (r^2) for the population under study.

The formula for calculating the test statistic i.e. tcal is adopted from Churchill (1999:811). For the purpose of this study a t distribution with degrees of freedom (n-2) is assumed, where n = 42 representing the number of respondents.

$$t_{cal} = r \left[\frac{n-2}{1-r^2} \right]^{1/2} = r \times \frac{\sqrt{(n-2)}}{\sqrt{(1-r^2)}}$$

where:

n = 42 (which is greater than 10) representing the number of respondents; r = product-moment coefficient; and r^2 = coefficient of determination.

For the purpose of comparison and decision-making, the critical t value, that is. $t_{critical}$ = 2.0211, where the alpha value is α = 0.05 i.e. 95% significance level, a two-tail distribution, and degrees of freedom (n - 2) = 42 - 2 = 40 (see t-distribution Table in Appendix C1 and the calculations of the t statistics in Appendix C2.

Leadership Practices for Academic Excellence

Table 3.11 and Chart 3.11 below show the actual modal frequencies; the corresponding percentage scores; the product-moment coefficient (r), the coefficient of determination (r^2), and the calculated t statistics for the data set on four key

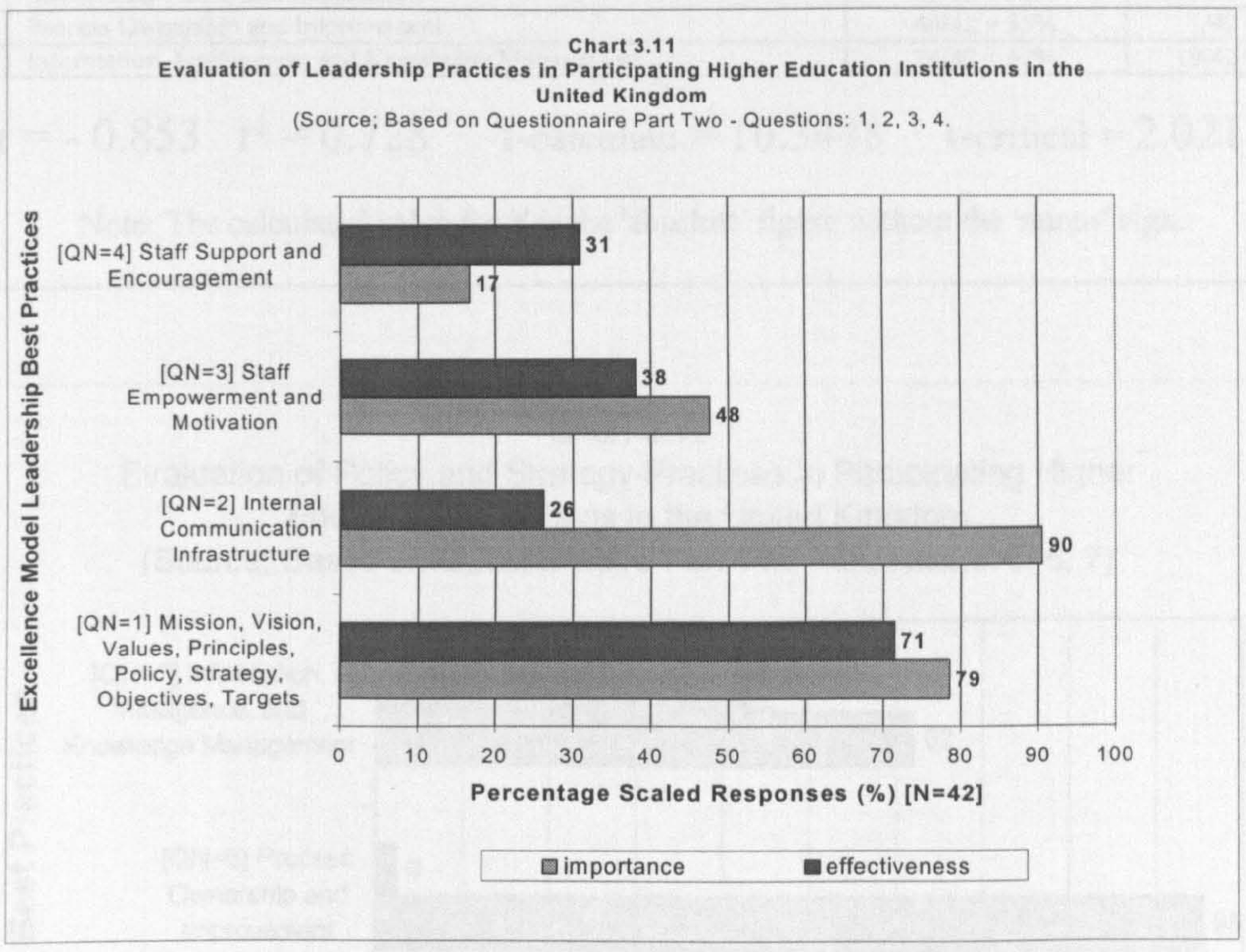
leadership practices in participating UK HEIs. Appendix C2 shows how the t statistics were calculated for 'leadership' practices. The four 'leadership' practices are represented by response to Questions [QN]: 1, 2, 3, and 4.

Table 3.11
Evaluation of Leadership Practices
Source: Based on Questionnaire Part Two – Questions: 1, 2, 3, 4.

QN = Number or Leadership Practice Number; Scaled Response Score: Highly Important Scores = 4, 5; Highly Effective Scores = 8, 9, 10.

QN	Critical Leadership Practices	Scaled Response	
		Highly Important	Highly Effective
1	Mission, Vision, Values, Principles, Policy, Strategy, Objectives, Targets	33/42 =79%	30/42 = 71%
2	Internal Communication Infrastructure	38/42 = 90%	11/42 = 26%
3	Empowerment and Motivation of Staff	20/42 = 48%	16/42 =38%
4	Support and Encouragement of Staff	7/42 = 17%	13/42 = 31%

$r = +0.295$ $r^2 = 0.087$ t-calculated = 1.9526 t-critical = 2.0211



From the test statistics we can see that, t-calculated is less than t-critical, therefore the null hypothesis that there is no linear relationship is accepted. This means overall, the degree of 'importance' of leadership practices is not related to the degree of 'effectiveness' of the practices under study. Thus any linear relationship between 'importance' and 'effectiveness' of leadership practices is very weak. This is confirmed by the near zero value for the product moment coefficient (r) i.e.+0.295).

Policy and Strategy Practices for Academic Excellence

Table 3.12 and Chart 3.12 below gives the actual modal frequencies and the corresponding percentage scores. The product-moment coefficient (r); coefficient of determination (r^2), and t statistics for the data set on three key quality management practices relating to formulation, communication and successful implementation of quality improvement policy and strategy in participating UK HEIs are also given. Appendix C2b shows how the test statistics were calculated for 'policy and strategy' practices. These practices are represented by responses to Questions [QN]: 5, 6, 7.

Table 3.12
Evaluation of Policy and Strategy Practices
Source: Based on Questionnaire Part Two – Questions: 5, 6, 7.

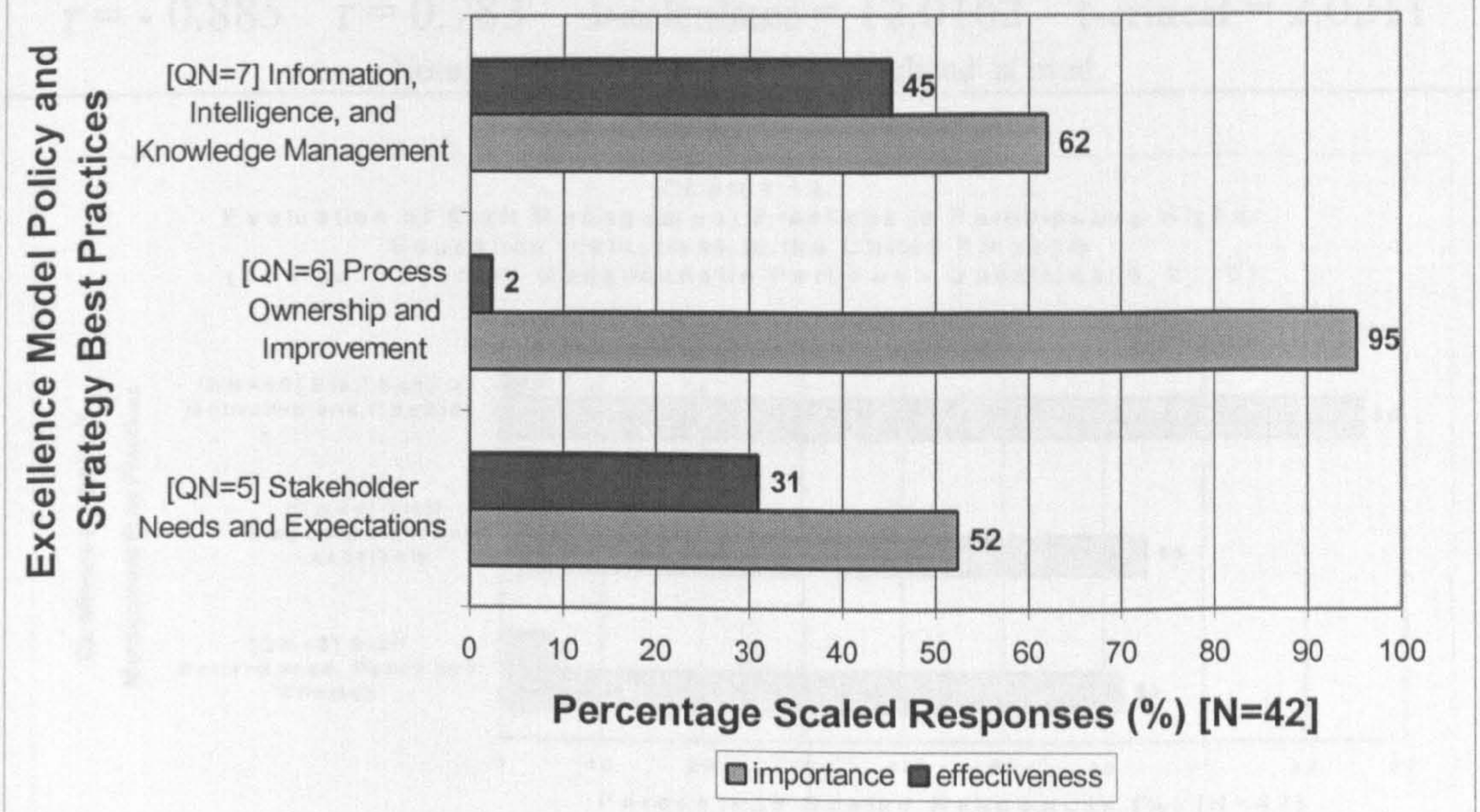
QN = Number or Policy & Strategy Practice Number; Scaled Response Score: Highly Important Scores = 4, 5; Highly Effective Score = 8 - 10.

QN	Critical Policy and Strategy Practices	Scaled Response	
		Highly Important	Highly Effective
5	Stakeholder Needs and Expectation	22/42 = 52%	13/42 = 31%
6	Process Ownership and Improvement	40/42 = 95%	1/42 = 2%
7	Information, Intelligence, and Knowledge Management	26/42 = 62%	19/42 = 45%

$r = -0.853$ $r^2 = 0.728$ t-calculate = 10.3448 t-critical = 2.0211

Note: The calculated value for 't' is the 'absolute' figure without the 'minus' sign.

Chart 3.12
Evaluation of Policy and Strategy Practices in Participating Higher Education Institutions in the United Kingdom
(Source; Based on Questionnaire Part Two - Questions: 5, 6, 7)



From the test statistics above we can see that, t-calculated is greater than t-critical, therefore the null hypothesis that, there is no linear relationship is rejected, and the alternative hypothesis is to be accepted. This means, overall, the degree of *importance* of the practices being evaluated is 'negatively' or 'inversely' related to the degree of *effectiveness*. This linear relationship is significant and is relatively very strong judging by the very high value of the product-moment correlation coefficient (r) i.e. - 0.853.

Staff Management Practices for Academic Excellence

Table 3.13 and Chart 3.13 below show the actual modal frequencies; the corresponding percentage scores; the product-moment coefficient (r), the coefficient of determination (r^2), and the t statistics for the data set on three key staff or people management practices for sustaining quality improvement in participating UK HEIs. Appendix C2c shows how the t statistics were calculated for 'staff management' practices. These practices are represented by responses to Questions [QN]: 8, 9, & 10.

Table 3.13
Evaluation of Staff Management Practices
Source: Based on Questionnaire Part Two – Questions: 8, 9, 10.

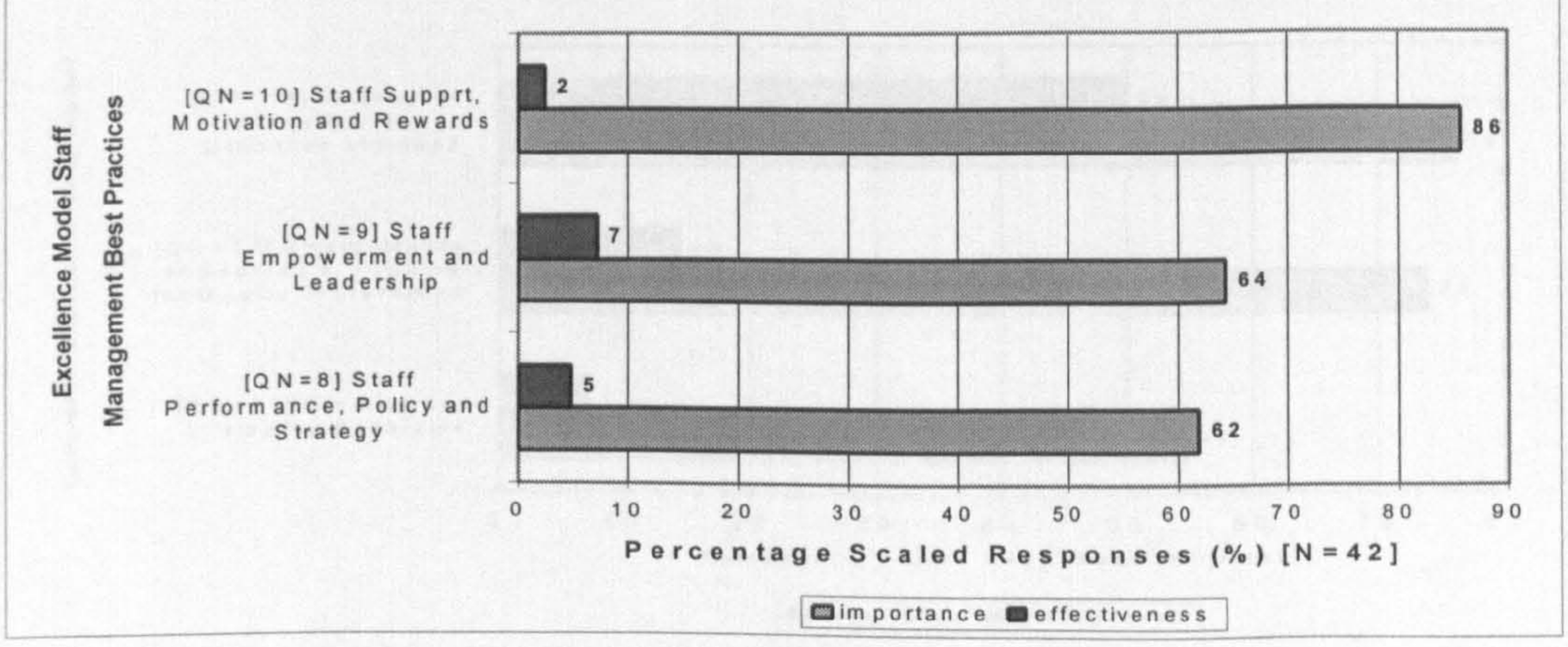
QN = Number or Staff Management Practice Number;
Scaled Response Score: Highly Important Scores = 4, 5, Highly Effective Scores = 8 - 10.

QN	Critical Staff Management Practices	Scaled Response	
		Highly Important	Highly Effective
8	Staff Performance, Policy and Strategy	26/42 = 62%	2/42 = 5%
9	Staff Empowerment and Leadership	27/42 = 64%	3/42 = 7%
10	Staff Support, Motivation and Rewards	36/42 = 86%	1/42 = 2%

r = - 0.885 r = 0.783 t-calculated = 12.0162 t-critical = 2.0211

Note: the absolute value of 't-calculated' is used.

Chart 3.13
Evaluation of Staff Management Practices in Participating Higher Education Institutions in the United Kingdom
(Source: Based on Questionnaire Part Two - Questions: 8, 9, 10)



The above test statistics show that, t-calculated is greater than t-critical, therefore the null hypothesis that, there is no linear relationship is rejected, and the alternative hypothesis that there is a relationship is accepted. This means, overall, the degree of *importance* of 'staff management' practices is 'negatively' or 'inversely' related to the degree of *effectiveness*. This linear relationship is significant and is relatively very strong judging by the very high value of the product-moment correlation coefficient (r) i.e. - 0.885.

Resources & Partnership Practices for Excellence

Table 3.14 and Chart 3.14 below show the actual modal frequencies; the corresponding percentage scores; r-value; r^2-value, and t statistics for the data set on three key resources and partnership practices for sustaining quality improvement in participating UK HEIs. Appendix C2d shows how the test statistics were calculated for 'resources and partnership' practices. These practices are represented by response to Questions [QN]: 11, 12, and 13.

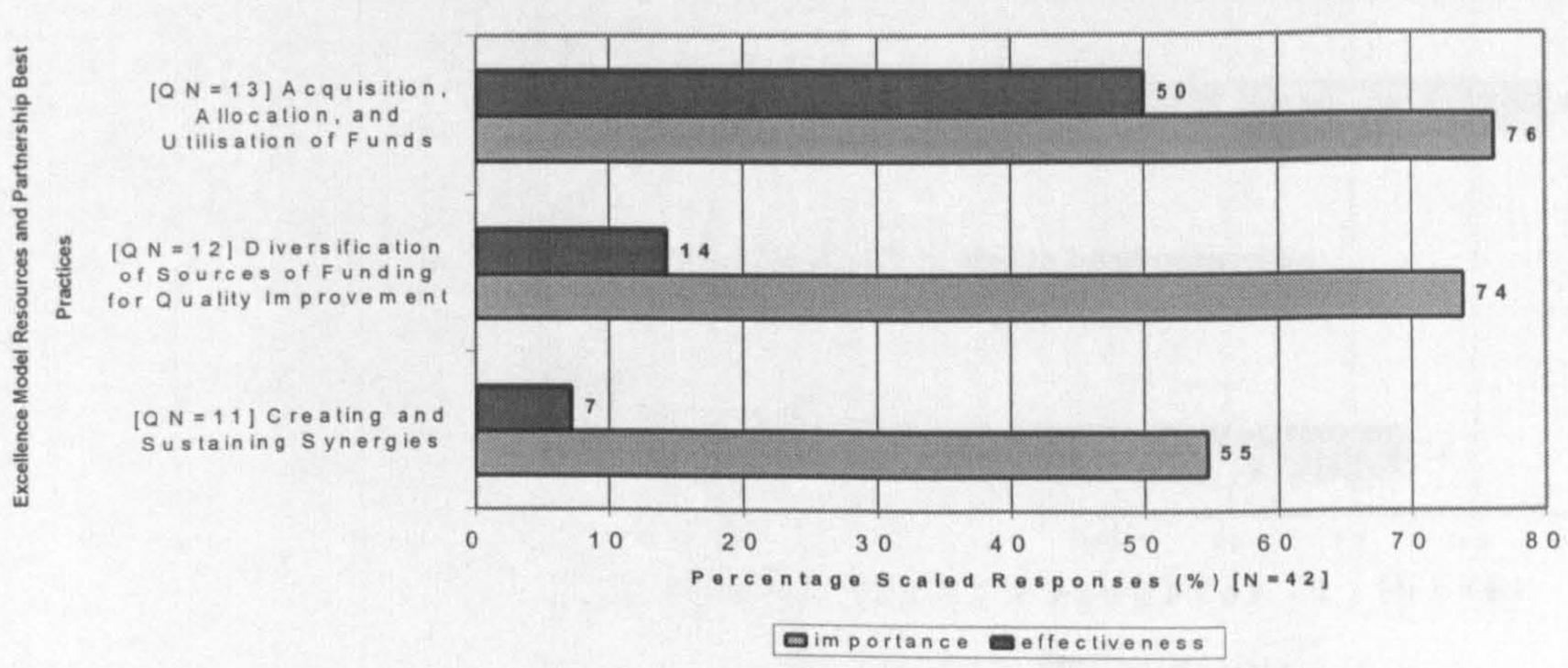
Table 3.14
Evaluation of Resources and Partnerships Practices
Source: Based on Questionnaire Part Two – Questions: 11, 12, 13.

QN = Number or Resources and Partnership Practice Number;
Scaled Response Score: Highly Important Scores = 4, 5, Highly Effective Scores = 8 - 10.

QN	Critical Resources and Partnership Practices	Scaled Response	
		Highly Important	Highly Effective
11	Creating and Sustaining Synergies	23/42 = 55%	3/42 = 7%
12	Diversification of Sources of Funding for Quality Improvement	31/42 = 74%	6/42 = 14%
13	Acquisition, Allocation, and Utilisation of Funds	32/42 = 76%	21/42 = 50%

$r = +0.691 \quad r^2 = 0.477 \quad$ t-calculated = 6.0412 $\quad$ t-critical = 2.0211

Chart 3.14
Evaluation of Resources & Partnership Practices in Participating Higher Education Institutions in the UK
(Source: Based on Questionnaire Part Two - Questions: 11, 12, 13)



The test statistics above show that, t-calculated is greater than t-critical, therefore the null hypothesis that, there is no linear relationship is rejected, and the alternative hypothesis that there is a relationship is accepted. This means, overall, the degree of *importance* of 'resource and partnership' practices is 'positively' related to the degree of *effectiveness*. This linear relationship is significant and is moderately strong judging by the above average value of the product-moment correlation coefficient (r) i.e. +0.691.

Processes Practices for Academic Excellence

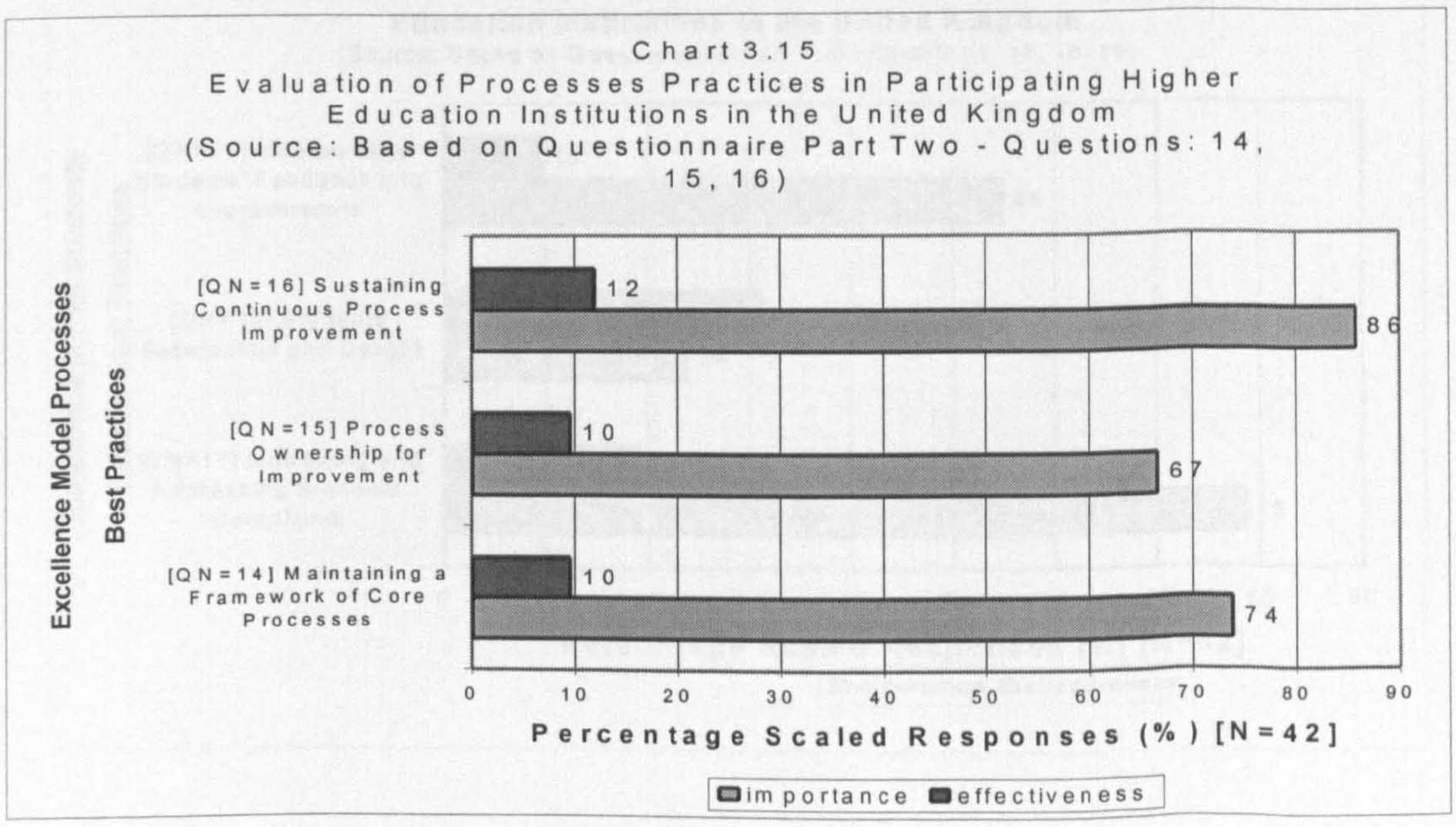
Table 3.15 and Chart 3.15 below show the actual modal frequencies; the corresponding percentage scores; r-value; r^2-value; and t statistics for three key processes practices for sustaining quality improvement in participating UK HEIs. Appendix C2e shows how the test statistics for 'processes' practices were calcuated. These practices are represented by response to Questions [QN]: 14, 15, and 16.

Table 3.15
Evaluation of Processes Practices
Source: Based on Questionnaire Part Two – Questions: 14, 15, 16.

QN = Number or Processes Practice Number;
Scaled Response Score: Highly Important Scores = 4, 5, Highly Effective Scores = 8 - 10.

QN	Critical Processes Practices	Scaled Response	
		Highly Important	Highly Effective
14	Maintaining a Framework of Core Processes	31/42 = 74%	4/42 = 10%
15	Process Ownership for Improvement	28/42 = 67%	4/42 = 10%
16	Sustaining Continuous Process Improvement	36/42 = 86%	5/42 = 11%

$r = +0.927 \quad r^2 = 0.859 \quad$ t-calculated = 15.6134 $\quad$ t-critical = 2.0211



The t statistics in Table 3.15 above shows that, the t-calculated value is greater than the t-critical; therefore the null hypothesis that, there is no linear relationship is rejected and the alternative hypothesis of a relationship is accepted. This means that, overall, the degree of *importance* of 'process' practices is 'positively' related to the degree of *effectiveness* - this relationship is confirmed by the high positive r-value of +0.927.

Students Results Practices for Academic Excellence

Table 3.16 and Chart 3.16 below show the actual modal frequencies; the corresponding percentage scores; r-value; r^2-value; and t-statistics for the data set on three key students results practices for sustaining quality improvement in participating UK HEIs. Appendix C2f shows how the t statistics were calculated for 'student results' practices. These practices are represented by questions: #17, #18, and #19.

Table 3.16
Evaluation of Students Results Practices
Source: Based on Questionnaire Part Two – Questions: 17, 18, 19.

QN = Number or Students Results Practice Number; Scaled Response Score: Highly Important Scores = 4, 5; Highly Effective Scores = 8 - 10.

QN	Critical Students Results Practices	Scaled Response	
		Highly Important	Highly Effective
17	Monitoring and Addressing Students' Complaints	33/42 = 79%	8/42 = 20%
18	Students' Satisfaction and Delight	10/42 = 24%	13/42 = 30%
19	Incorporating Students' Feedback into Improvements	23/42 = 55%	4/42 = 10%

$r = -0.562$ $r^2 = 0.316$ t-calculated = 4.2979 t-critical = 2.0211

Note: the absolute value of t-calculated is used

Chart 3.16
Evaluation of Students Results Practices in Participating Higher Education Institutions in the United Kingdom
(Source; Based on Questionnaire Part Two - Questions: 17, 18, 19)

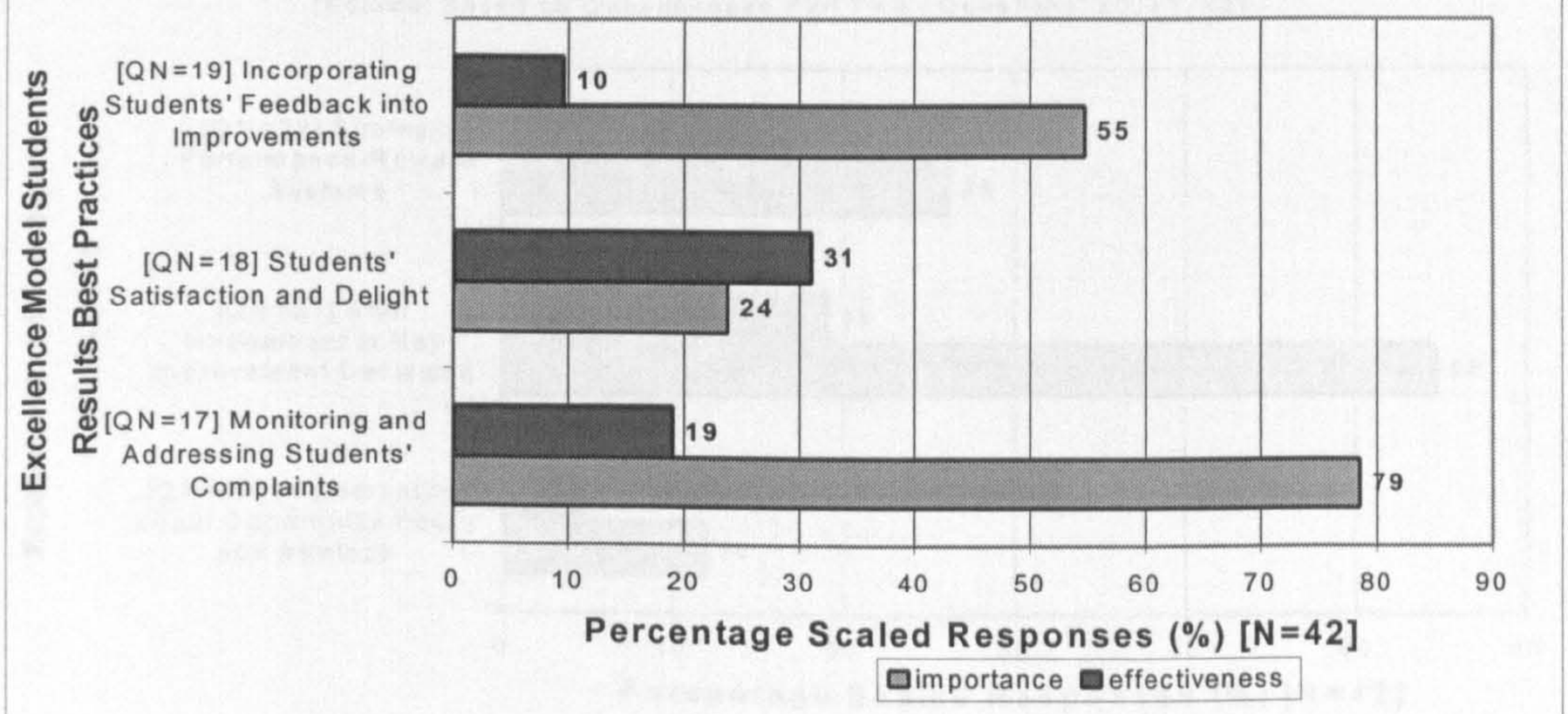


Table 3.16 above shows that, the t-calculated is greater than t-critical, therefore the null hypothesis that, there is no linear relationship is rejected and the alternative hypothesis of a relationship is accepted. This means that, overall, the degree of *importance* of 'student results' practices is 'negatively' or 'inversely' related to the degree of *effectiveness* of the practices. This inverse linear relationship is moderately strong, and is confirmed by the average r-value of - 0.562.

Staff Results Practices for Academic Excellence

Table 3.17 and Chart 3.17 below show the actual modal frequencies; the corresponding percentage scores; r-value; r-value; and t statistics for the data set on three key staff results practices for sustaining quality improvement in participating UK HEIs. Appendix C2g shows how the t statistics were calculated for 'staff results' practices. These practices are represented by response to questions: #20, #21, #22.

Table 3.17
Evaluation of Staff Results Practices
Source: Based on Questionnaire Part Two – Questions: 20, 21, 22.

QN = Number or Staff Results Practice Number;
Scaled Response Score: Highly Important Scores = 4, 5, Highly Effective Scores = 8 - 10.

QN	Critical Staff Results Practices	Scaled Response	
		Highly Important	Highly Effective
20	Implementing Equal Opportunity Policy and Strategy	5/42 = 12%	2/42 = 5%
21	Staff Involvement in Key Improvement Decisions	23/42 = 55%	8/42 = 10%
22	Strategic Performance-Reward Systems	11/42 = 17%	7/42 = 16%

$r = +0.054$ $r^2 = 0.003$ t-calculated = 0.3420 t-critical = 2.0211

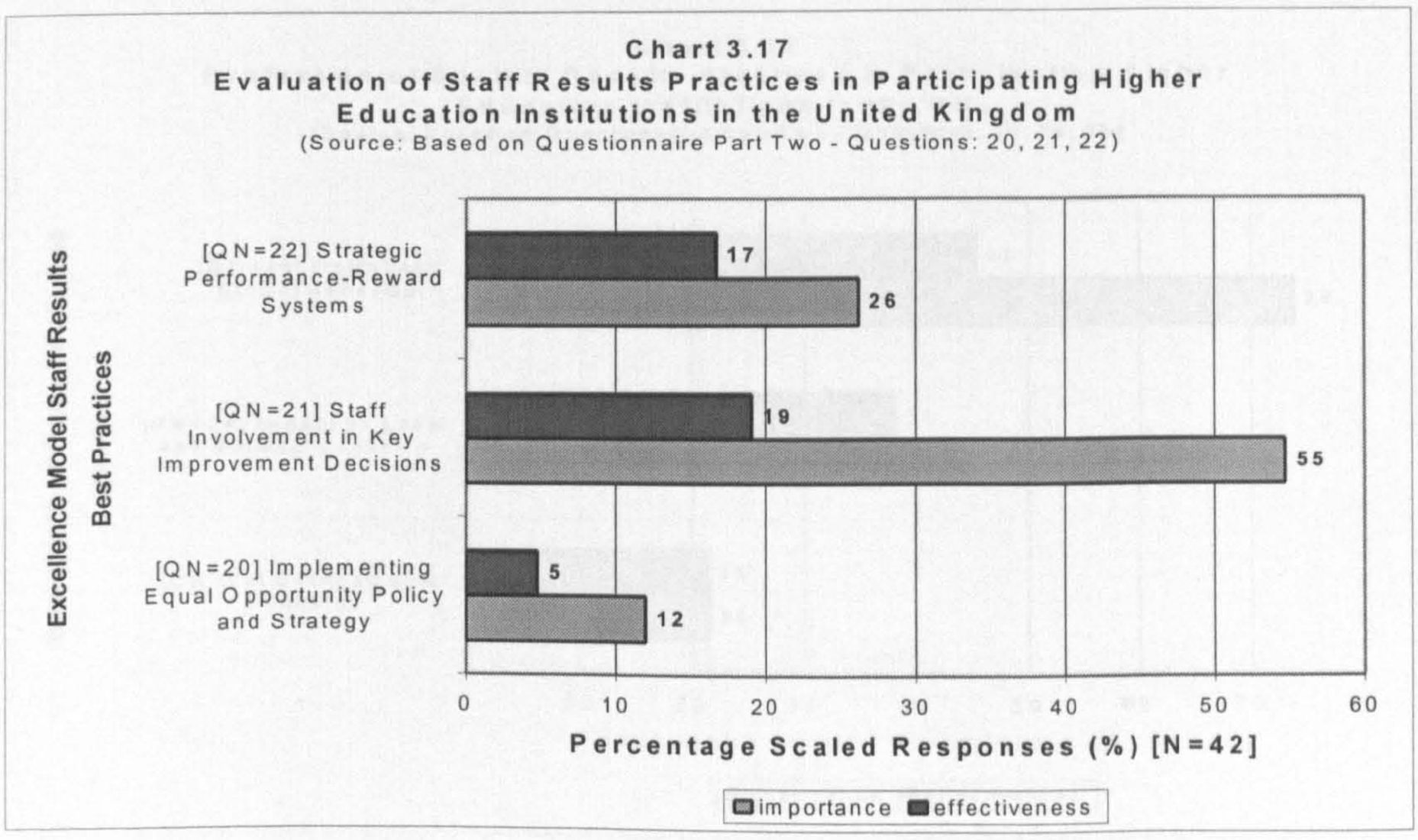


Table 3.17 above shows that, the t-calculated is less than t-critical, therefore the null hypothesis that, there is no linear relationship is accepted. This means that, overall, the degree of *importance* of 'staff results' practices is not related to the degree of *effectiveness* of the practices - at least not linearly. Any possible relationship between 'importance' and 'effectiveness' may however be non-linear i.e. curvi-linear. The absence of a linear relationship is confirmed by the near zero r-value of + 0.054.

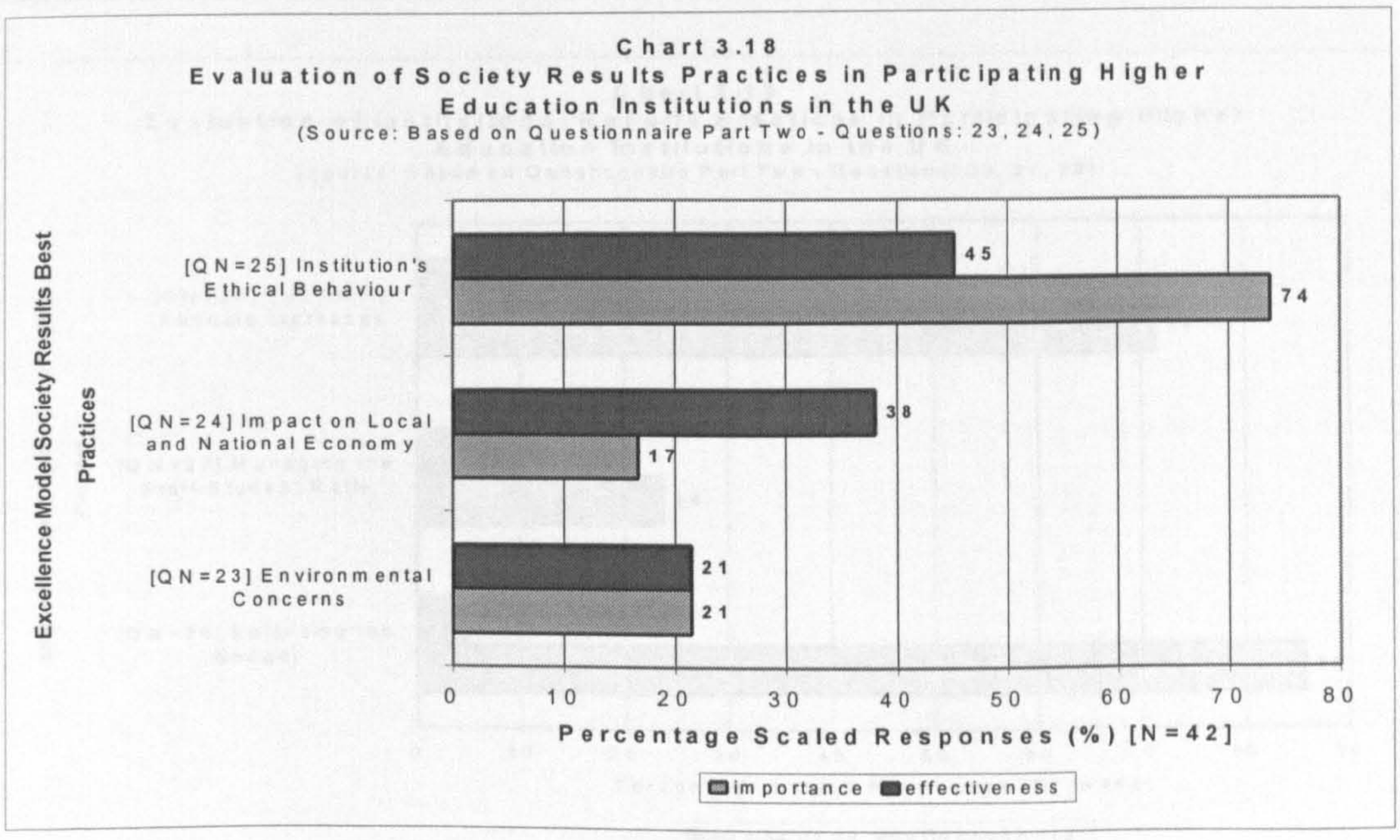
Society Results Practices for Academic Excellence

Table 3.18 and Chart 3.18 below show the actual modal frequencies; the corresponding percentage scores; r-value; r^2-value; and the t-statistics for the data set on three key society results practices for sustaining quality improvement in participating UK HEIs. Appendix C2h shows how the t statistics were calculated for 'society results' practices. These practices are represented by questions: #23, #24, #25.

Table 3.18
Evaluation of Society Results Practices
Source: Based on Questionnaire Part Two – Questions: 23, 24, 25.

QN = Number or Society Results Practice Number;
Scaled Response Score: Highly Important Scores = 4, 5, Highly Effective Scores = 8 - 10.

QN	Critical Society Results Practices	Scaled Response	
		Highly Important	Highly Effective
23	Environmental Concerns	9/42 = 21%	9/42 = 21%
24	Impact on Local and National Economy	7/42 = 17%	16/42 = 39%
25	Institution's Ethical Behaviour	31/42 = 74%	19/42 = 45%
$r = + 0.851$ $r^2 = 0.724$ t-calculated = 10.2439 t-critical = 2.0211			



The test statistics in Table 3.18 above shows that, t-calculated is greater than t-critical, therefore the null hypothesis that, there is no linear relationship is rejected; and the alternative hypothesis that, there is a linear relationship is accepted. This means that, overall, the degree of *importance* of 'society results' practices is in this case 'positively' related to the degree of *effectiveness* of the practices. The linear relationship is very significant judging by the high positive r-value of + 0.851.

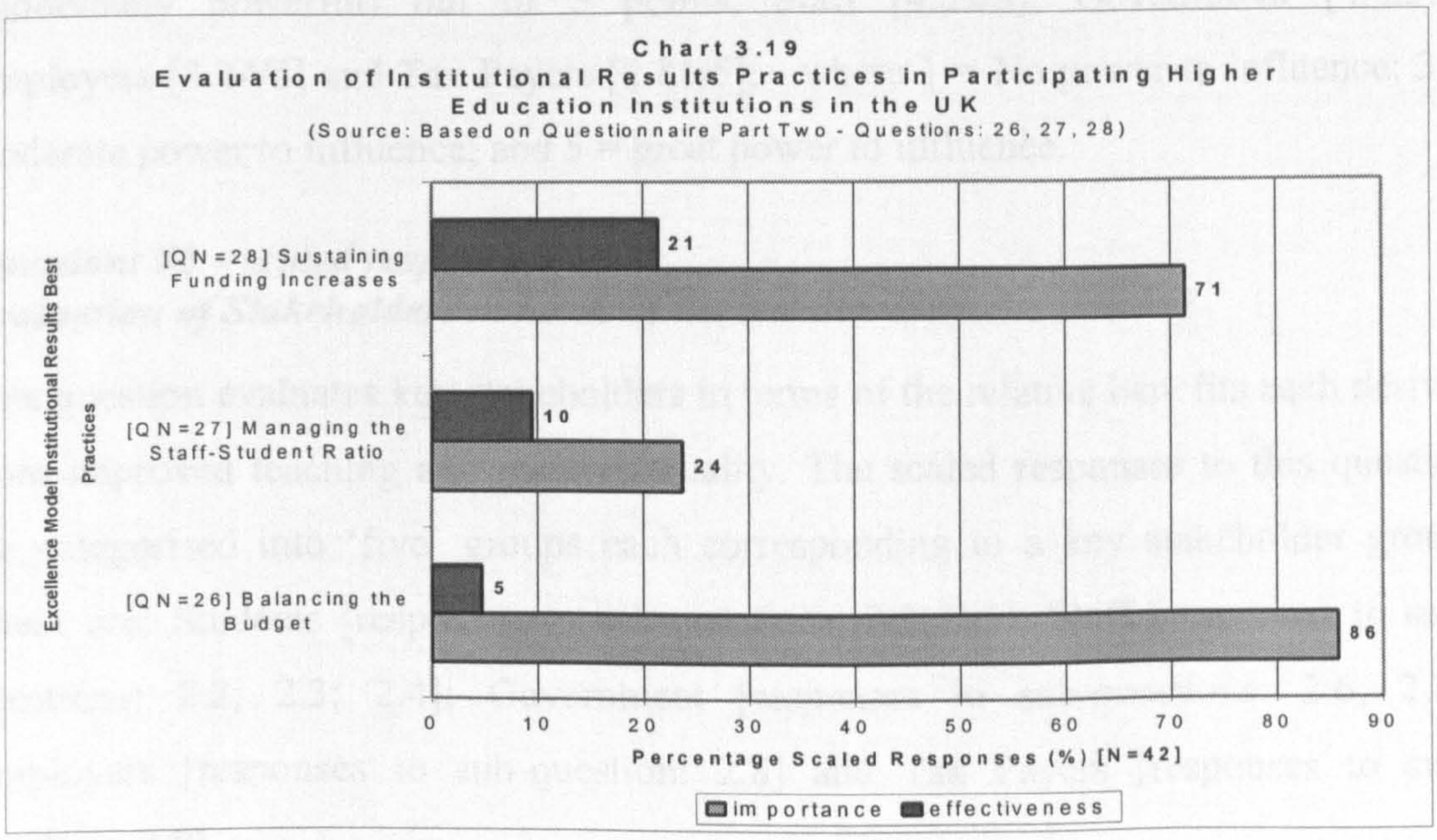
Institutional Results Practices for Academic Excellence

Table 3.19 and Chart 3.19 below show the actual modal frequencies; the corresponding percentage scores; r-value; r^2-value; and the test statistics for the data set on three key institutional results practices for sustaining quality improvement in participating UK HEIs. Appendix C2i shows how the t statistics were calculated for 'institutional results' practices. These practices are represented by questions: #26, #27, #28.

Table 3.19
Evaluation of Institutional Results Practices
Source: Based on Questionnaire Part Two – Questions: 26, 27, 28.

QN = Number or Institutional Results Practice Number;
Scaled Response Score: Highly Important Scores = 4, 5, Highly Effective Scores = 8 - 10.

QN	Critical Institutional Results Practices	Scaled Response	
		Highly Important	Highly Effective
26	Balancing the Budget	36/42 = 86%	2/42 = 5%
27	Managing the Staff-Student Ratio	10/42 = 24%	4/42 = 10%
28	Sustaining Funding Increases	30/42 = 71%	9/42 = 21%
$r = -0.021$ $r^2 = 0.0004$ t-calculated = 0.1328 t-critical = 2.0211			



The test statistics in Table 3.19 above shows that t-calculated is less than t-critical, therefore the null hypothesis that, there is no linear relationship is accepted; and the alternative hypothesis that, there is a linear relationship is rejected. This means that, overall, the degree of *importance* of 'institutional results' practices is in this case not linearly related to the degree of *effectiveness* of the practices. The absence of a linear relationship is confirmed by the near zero r-value of + 0.021.

Quantitative Analysis of Questionnaire Part Three

This sub-section shows the quantitative analysis of the scaled responses for Questions: #1, #2, #3, #7, #8, #9, #10 and #11; and the fixed alternative responses for #4, #5, and #6; the analysis is presented in the order given as follows:

Question: #1 – scaled responses
Evaluation of Key Stakeholders in terms of their Relative Power to Influence

This question evaluates key stakeholders in terms of their power to influence the quality of teaching and learning. The scaled responses to this question are categorised into 'five' groups each corresponding to a key stakeholder group. These are: Students [responses to sub-questions: 1.1; 1.2; 1.6]; Staff [responses to sub-questions: 1.3; 1.4; 1.5]; Government [responses to sub-questions: 1.7; 1.8; 1.9]; Employers [responses to sub-question: 1.10] and Tax Payers [responses to sub-question: 1.11]. The analysis of the empirical data presented in Appendix B3 gives the average score for each stakeholder group; these are Students [3.27/5] representing a score of 3.27 (moderately powerful) out of 5 points; Staff [4.05/5]; Government [4.02/5]; Employers [3.24/5] and Tax Payers [2.81/5]; - where 1 = No power to influence; 3 = moderate power to influence; and 5 = great power to influence.

Question: #2 – scaled responses
Evaluation of Stakeholders in terms of the Relative Benefits Derived

This question evaluates key stakeholders in terms of the relative benefits each derives from improved teaching and research quality. The scaled responses to this question are categorised into 'five' groups each corresponding to a key stakeholder group. These are: Students [responses to sub-questions: 2.1; 2.5]; Staff [responses to sub-questions: 2.2; 2.3; 2.4]; Government [responses to sub-questions: 2.6; 2.7]; Employers [responses to sub-question: 2.8] and Tax Payers [responses to sub-question: 2.9].

The analysis of the empirical data presented in Appendix B3 gives the average score for each stakeholder group. These are as follows Students [3.51/5] representing a score of 3.51 (moderate benefits derived) out of 5 points; Staff [4.03/5]; Government [4.91/5]; Employers [3.45/5] and Tax Payers [2.95/5]; - where 1 = No Benefits Derived; 3 = Moderate Benefits Derived; and 5 = Great Benefits Derived.

Question: #3 – scaled response
Evaluation of Stakeholders in terms of their Long-term Interests in Education

This question evaluates key stakeholders in terms of their sustained interests in the survival of the system of higher education in the United Kingdom. The scaled responses to this question are categorised into 'five' groups each corresponding to a key stakeholder group. These are: Students [response to sub-questions: 3.1; 3.3]; Staff [response to sub-questions: 3.2]; Government [response to sub-questions: 3.4; 3.5]; Employers [response to sub-question: 3.6] and Tax Payers [response to sub-question: 3.7]. The analysis of the empirical data presented earlier in Table 7.5, Chapter Seven; gives the average score for each stakeholder group as follows: Students [3.94/5] representing a score of 3.94 (long-term interest) out of 5 points; Staff [4.76/5]; Government [4.89/5]; Employers [3.83/5] and Tax Payers [3.64/5]; - where 1 = short-term interest; 3 = medium-term interest; and 5 = long-term interest.

Question: #4 – fixed alternative responses
Debate about whether or not Stakeholders should pay the Economic Rate

This question asked respondents whether or not Stakeholders should pay the economic price for the benefits they derive from higher education. 27 respondents out of 42 i.e. [27/42] representing about 64% respondents, said 'YES' stakeholder groups who benefit the most should pay amounts proportionate to their benefits; [14/42] representing about 33% said 'NO'; and only 1 out of 42 respondents [1/42] i.e. about 2% said 'DO NOT KNOW'. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #5 – fixed alternative responses
Debate about the Extent to which Institutions should engage in Commerce

This question asked respondents about the extent to which higher education institutions (HEIs) should be allowed to set up businesses and reinvest profits earned in quality development. 15 respondents out of 42 i.e. [15/42] representing about 36% respondents, said 'YES' institutions must engage in commercial ventures; 8 out of 42

respondents [8/42] representing about 19% said 'NO'; and 19 out of 42 respondents [19/42] i.e. about 45% said 'DO NOT KNOW'. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #6 – fixed alternative responses
Management ability to accurately predict shifts in Government Funding Policy

This question asked respondents about their ability to accurately predict future direction of UK Government Funding Policy, and how the direction of shift impacts on their quality development strategy. 27 respondents out of 42 i.e. [27/42] representing about 64% respondents, predicted an 'INCREASE' in funding for higher education activities; 11 out of 42 respondents [11/42] representing about 26% predicted a 'DECREASE'; and 4 out of 42 respondents [4/42] i.e. about 10% said 'DO NOT KNOW'. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #7 – scaled responses
Evaluation of Stakeholders in terms of their Long-term Interests in Education

This question evaluates key stakeholders in terms of their contribution towards helping institutions achieve their quality and performance improvement objectives. The scaled responses to this question are categorised into 'five' groups each corresponding to a key stakeholder group. These are: Students [response to sub-questions: 7.1; 7.2; 7.6]; Staff [response to sub-questions: 7.3; 7.4; 7.5]; Government [response to sub-questions: 7.7; 7.8; 7.9]; Employers [response to sub-question: 7.10] and Tax Payers [response to sub-question: 7.11]. The analysis of the empirical data presented in Appendix B3 gives the average score for each stakeholder group. These are follows - Students [3.71/5] representing a score of 3.71 (moderate contribution) out of 5 points; Staff [3.96/5]; Government [3.85/5]; Employers [3.05/5] and Tax Payers [2.69/5]; - where 1 = no contribution; 3 = moderate contribution; and 5 = very significant contribution.

Question: #8 – scaled responses
Evaluation of Measures for capturing Students'/Customers' Perception of Quality

This question evaluates the measures or techniques used by institutions to capture the perceptions of stakeholders about the level of quality of provision and standards of awards and the overall performance of the institution. The scaled responses to this question are categorised into 'two' groups of measures. These are Teaching Quality

Assessment (TQA) Scores and Research Assessment Exercise (RAE) Results [response to sub-questions: 8.1]; and Service Delivery [response to sub-questions: 8.2]. The analysis of the empirical data presented in Appendix B3 gives the average score for each 'group of measures'. These are as follows: Teaching Quality Assessment (TQA) Results and Research Assessment Exercise (RAE) Results [4.88/5] representing a score of 4.88 (extremely important) out of 5 points; Service Delivery [4.55/5]; - where 1 = not at all important; 3 = moderately important; and 5 = extremely important.

Question: #9 – scaled responses
Evaluation of Measures for capturing Staff Perception of Quality

This question evaluates the measures or techniques used by institutions to capture the perceptions of academic and administrative staff about the level of quality and the overall performance of the institution. The scaled responses to this question are categorised into 'four' groups of measures. These are Staff Education and Training [responses to sub-questions: 9.1]; Staff Empowerment & Leadership [response to sub-questions: 9.2]; Staff Performance Related Rewards [responses to sub-question: 9.3]; and Environmental and Health & Safety Concerns [responses to sub-question: 9.4].

The analysis of the empirical data presented in Appendix B3; gives the average score for each 'group of measures'. These are Staff Education and Training [4.91/5], representing a score of 4.91 (extremely important) out of 5 points. Staff Empowerment and Leadership [4.14/5]. Staff Performance Related Rewards [2.98/5]; and Environmental and Health and Safety Concerns [2.62/5]; - where 1 = not at all important; 3 = moderately important; and 5 = extremely important.

Question: #10 – scaled response
Evaluation of Measures for capturing Key External Stakeholders' Perception of Institutional Quality and Management Performance

This question evaluates the measures or techniques used by institutions to capture the perceptions of key external stakeholders about the level of quality and the overall performance of the higher education institution as a whole or a department within the institution.

The scaled responses to this question are categorised into '14' groups of measures in Table 3.20 below; where 1 = not at all important, 3 = moderately important, 5 =

extremely important. Table 3.20 presents the average results for all 42 respondents or their respective institutions.

Table 3.20
Measures for Capturing External Stakeholders Perception of Institutional Quality and Performance
Source: Based on Questionnaire Part Three – Question #10.1 - #10.14

QN = Sub-Questions; Average Score = Relative Importance

QN	Perception Measures	Average Score
10.1	Total Quality Strategy	3.45
10.2	Human Resource Management	3.81
10.3	Learning Infrastructure	4.14
10.4	Communication Strategy	4.26
10.5	Collaborative Partnerships	3.81
10.6	Internal and External Audits	4.19
10.7	Research Assessment Exercises (RAE)	4.69
10.8	Teaching Quality Assessment (TQA)	4.62
10.9	Entry Standards	4.69
10.10	Staff-Student Ratio	4.36
10.11	Facilities Spending	4.45
10.12	First Class and Second-Uppers	4.81
10.13	Graduate Destinations	4.83
10.14	League Tables	3.33

Question: #11 – scaled responses
Evaluation of Measures for capturing Society's Perception of Quality

This question evaluates the measures used by institutions to capture the perceptions of society about the level of quality and performance of the institution. The scaled responses to this question are categorised into 'six' groups of measures. Equal Opportunity for Employees [sub-question: 11.1]. Impact on local and national economic development [sub-question: 12.2]; Institution's Ethical Behaviour [sub-question: 11.3]; Support for Sports and Leisure [sub-question: 11.4]; Activities to reduce and/or prevent Pollution [response to sub-question: 11.5]; and Disclosure of information on Sustainability of Resources [response to sub-question: 11.6].

The analysis of the empirical data presented in Appendix B3 gives the average score for each 'group of measures'. These are as follows Equal Opportunity for Employees [4.62/5] representing a score of 4.62 (extremely important) out of 5 points. Impact on local and national economic development [3.48/5], and the institution's ethical Behaviour [4.83] and the Support for Sports and Leisure [2.74/5]. The Activities to reduce and/or prevent Pollution [2.60/5]; and Disclosure of information on Sustainability of Resources for Teaching, Learning, Scholarship and Research; including resources for administrative and support-service activities [2.57/5]; - where 1 = not at all important; 3 = moderately important; and 5 = extremely important.

Quantitative Analysis of Questionnaire Part Four

This sub-section provides a Microsoft Excel spreadsheet analysis of the 'scaled responses' to questions: #1, #2, and #6; the 'fixed alternative responses' to questions: #3, #4, and #5; including an SPSS spreadsheet analysis of questions: #12, #13, #14, #15, and #16, transferred from Questionnaire Part One.

Question: #1 – scaled responses
Debate about the Relevance of Performance Measures in UK HEIs

In the opinion of 33 out of 42 respondents [33/42] i.e. about 79% respondents, the use of performance measures in the assessment of institutions, is 'highly to extremely' relevant. Most of these respondents gave it a score of 8 out of 10 i.e. [8/10]; where 1 = not at all relevant, 5 = moderately relevant, and 10 = extremely relevant.

Question: #2 – scaled responses
Debate about the Usefulness of Performance Indicators in UK HEIs

In the opinion of 29 out of 42 respondents, representing [29/42] i.e. about 69% respondents, the use of specific performance indicators in the assessment of individual and institutional performance, is 'highly' useful. Most of these respondents gave it an average score of 7.5 out of 10 i.e. [7.5/10]; where 1 = not at all useful, 5 = moderately useful, and 10 = extremely useful.

Question: #3 – fixed alternative responses
The Effectiveness of the link between Staff Performance Indicators & Rewards

This question asked respondents about how successful they have been at linking staff performance indicators and staff rewards in practice. 6 respondents out of 42 i.e. [6/42] representing about 14% respondents, said 'YES' they have effectively linked staff performance indicators with staff rewards. However, a massive 35 out of 42 respondents [35/42] representing about 83% said 'NO' they have not been successful; and only 1 out of 42 respondent [1/42] i.e. about 2% said 'DO NOT KNOW'. The reasons given for these responses are analysed later under 'qualitative data analysis'.

Question: #4 – fixed alternative responses
Impact of Widening Participation on Entry Standards and the Quality of Teaching

This question asked respondents their opinion on the impact so far of the Government's Widening Participation Agenda on the institution's Policy on Entry Standards. 22 respondents out of 42 i.e. [22/42] representing about 52% respondents,

said Entry Standards for their institution is 'DECLINING'; 16 out of 42 respondents [16/42] representing about 26% said their Entry Standards are 'IMPROVING'; the remaining 4 out of 42 respondents [4/42] i.e. about 10% said 'DO NOT KNOW'. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #5 – fixed alternative responses
Assessing the Gap Between Entry Standards and Standards of Awards

This question asked respondents about what they see as the perceived 'gap' between 'Entry Standards' and 'Standards of Awards'. 5 respondents out of 42 i.e. [5/42] representing about 12% respondents, thought the 'gap' is 'WIDENING'; a massive 34 out of 42 respondents [34/42] representing about 81% thought the 'gap' is 'NARROWING'; and the remaining 3 out of 42 respondents [3/42] i.e. about 7% said 'DO NOT KNOW'. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #6 – scaled responses
Evaluating how specific Performance Indicators impact on Internal Judgement

Table 3.21 below, shows the average score from the evaluating of specific performance indicators, commonly used for monitoring and controlling the performance of both academic, administrative and support-service functions in HEIs. The scores are based on the empirical data presented in Appendix B4.

Table 3.21
Importance and Effectiveness of Specific Performance Indicators in Higher Education
Source: Based on Questionnaire Part Four – Question #6AC and #6AD

QN = Sub-questions; imp = importance score; effe = effectiveness score; PIs = Performance Indicators; AC = Academic; AD = Administrative

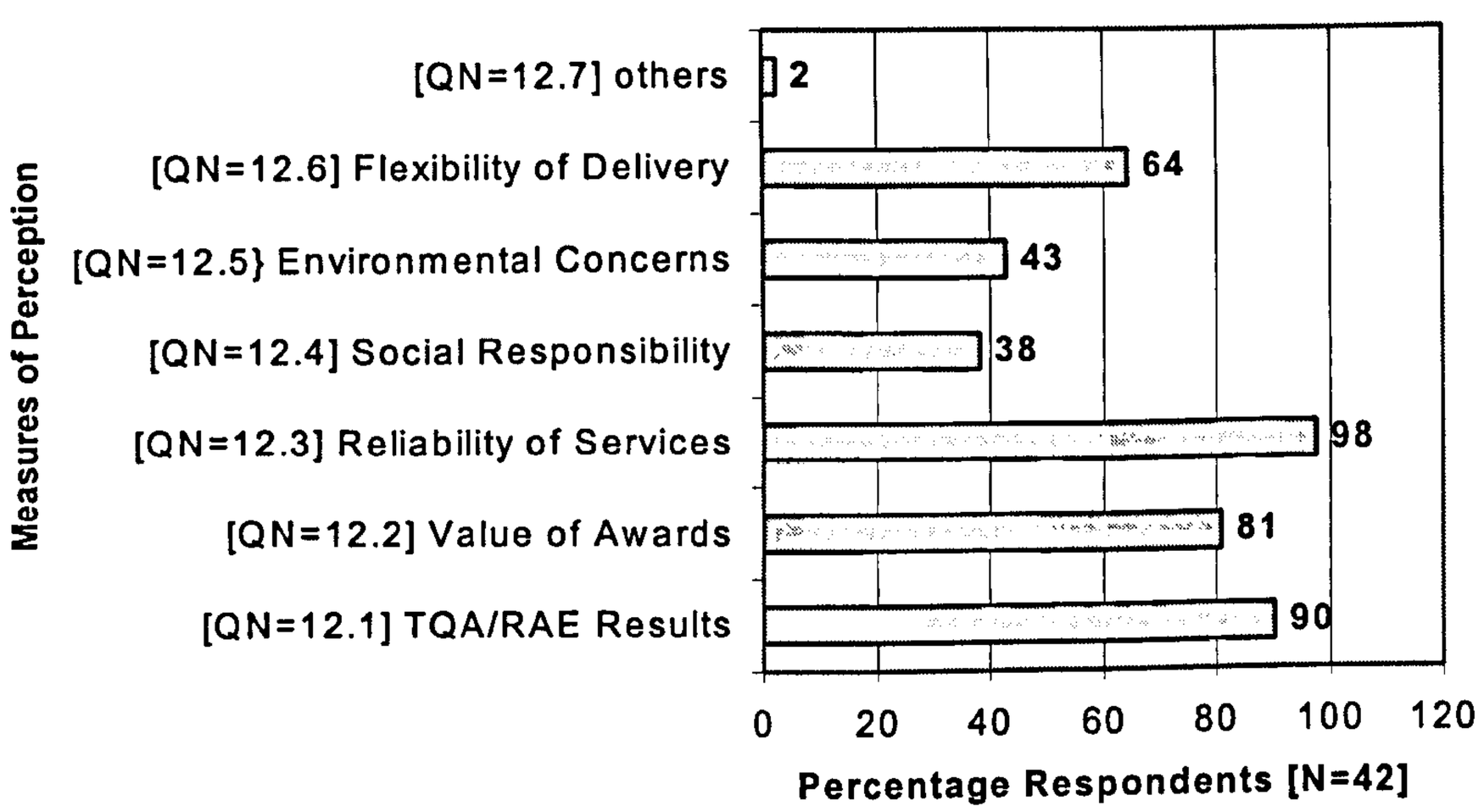
QN	Specific Performance Indicators	Average Score		QN	Specific Performance Indicators	Average Score	
		imp	effect			imp	effe
#6AC	**Academic PIs**						
6AC.1	Cost Per Full-Time Equivalent Students	3.9	3.7	6AC.14	Staff Absenteeism	4.5	4.2
6AC.2	Research Income	4.9	4.7	6AC.15	Staff Turnover	4.5	4.1
6AC.3	Research Assessment Exercise (RAE)	4.6	4.7	6AC.16	Staff & Student Complaints	4.7	4.5
6AC.4	Teaching Quality Assessment (TQA)	4.4	4.4	6AC.17	Number of Press Coverage	4.5	4.4
6AC.5	Submission Rates for Research Degrees	3.1	3.1	6AC.18	Number of Accolades & Awards	4.7	4.8
6AC.6	Number of Sponsored Research Students	4.5	4.4	6AC.19	Collaborative Partnerships	3.8	3.6
6AC.7	Occupation of Graduates	2.6	2.3	6AC.20	Sharing of Best Practices	4.9	4.8
6AC.8	Staff-Student Ratio	2.9	2.6	#6AD	**Administrative PIs**		
6AC.9	Equipment Cost Per Staff	2.9	2.7	6AD.1	Administrative Costs Per Student	3.6	3.5
6AC.10	Membership of Research Councils	4.5	4.4	6AD.2	Premise Costs Per Student	3.3	3.3
6AC.11	Peer Review	4.3	3.9	6AD.3	Library Costs Per Student	3.5	3.5
6AC.12	Research Publications	4.8	4.8	6AD.4	Careers Service Costs Per Student	3.2	3.1
6AC.13	Staff Participation in Quality	4.6	4.6	6AD.5	Support-Staff-Academic Staff Ratio	3.0	2.9

The 'Average Score' in Table 3.21 above, is based on the evaluation of best practices in terms of relative 'importance'; where the scaled response: 1 = 'not at all important'; 3 = moderately important; and 5 = extremely important. For the evaluation in terms of relative 'effectiveness' of a practice; the scaled response: 1 = not at all effective; 3 = moderately effective; and 5 = extremely effective for achieving pre-determined quality and performance improvement objectives and targets.

Question: #12 – scaled responses – transfer from Questionnaire Part One
Identification of Commonly Used Measures of Students' Perception of Quality

Chart 3.20 shows that: (1) reliability of services; (2) teaching and research assessment results, i.e. TQA and RAE results; and (3) the value of awards, are the top three measures used by most institutions for capturing students' perception about the quality of provision and standard of awards. The bottom three measures are: (4) Flexibility of Delivery; (5) Environmental Concerns; and (6) Social Responsibility.

Chart 3.20
Key Measures for Capturing Students' Perception of Quality in Higher Education
(Source: Based on Questionnaire Part One - Question #12)

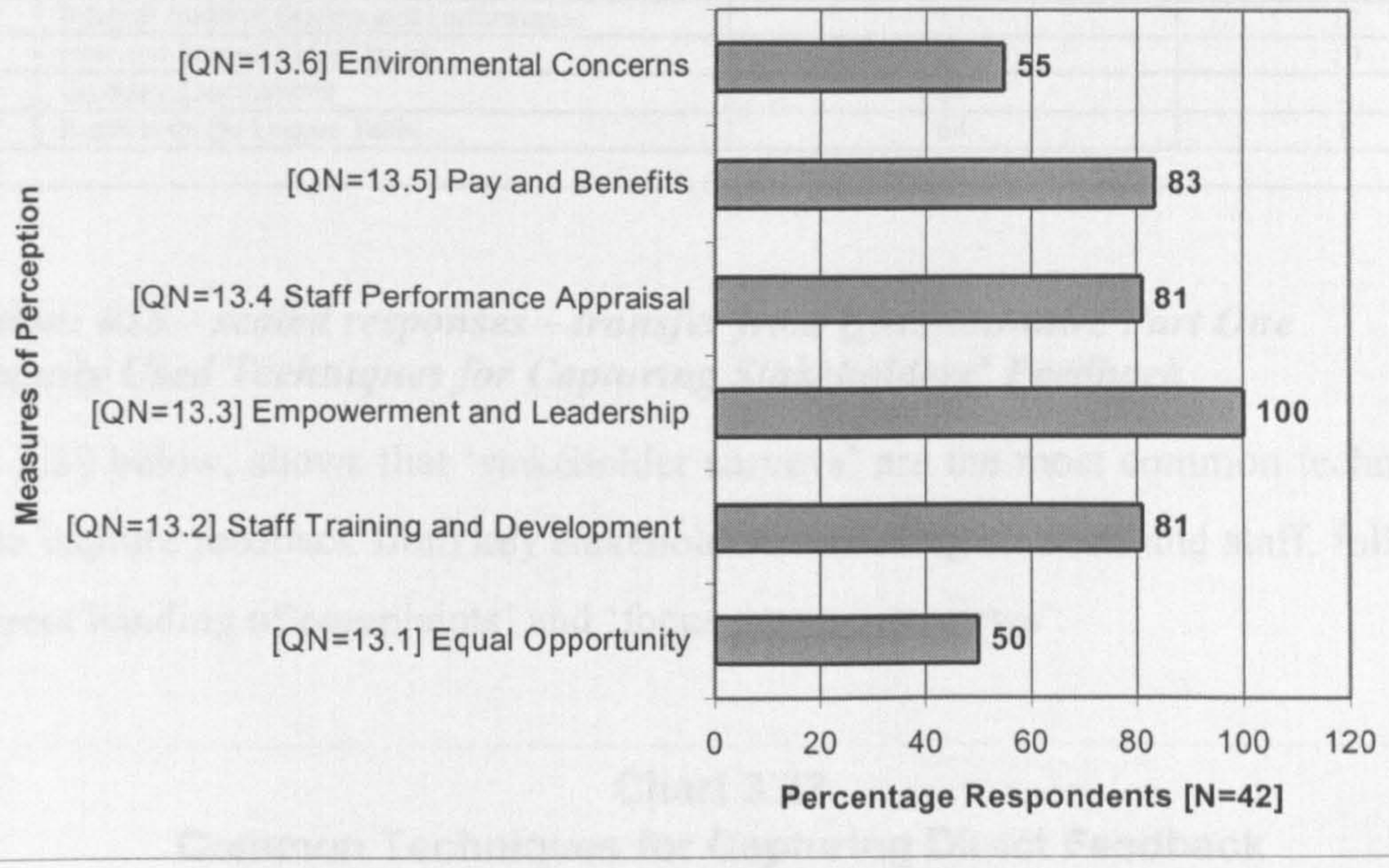


Question: #13 – scaled responses – transfer from Questionnaire Part One
Identification of Commonly Used Measures of Staff Perception of Quality

Chart 3.21 below, shows that: (1) Empowerment and Leadership; (2) Pay and Benefits; and (3) Staff Training and Development, are the top three measures used by most institutions for capturing the perception of academic and administrative staff,

about the quality and performance of the institution. The bottom three measures are: (4) Staff Performance Appraisal; (5) Environmental Concerns; and (6) Equal Opportunity.

Chart 3.21
Identification of Measures for Capturing Staff Perception of Institutional Quality
(Source: Based on Questionnaire Part One - Question #13)



Question: #14 – scaled responses – transfer from Questionnaire Part One
Commonly Used Measures of External Stakeholders' Perception of Quality

Table 3.22 below, shows the ranking for measures commonly used by UK higher education institutions to capture the perception of key external stakeholders about the quality and performance of the institution. These external stakeholders include the government, potential employers, funding bodies, students, and the society as a whole. The top five commonly used measures are: (1) Funding for teaching and research infrastructure; (2) External Audit Results of teaching and research quality and performance e.g. QAA Scores; (3) Research Assessment Exercise (RAE) Results; (4) Collaborative Partnership Performance Results; (5) Graduate Destinations. The bottom five measures are: (9) Staff-Student Ratios; (10) First and Second Class Uppers; (11) External Communication Strategy; (12) Internal Audit of Quality and Performance; and (13) Total Quality Strategy.

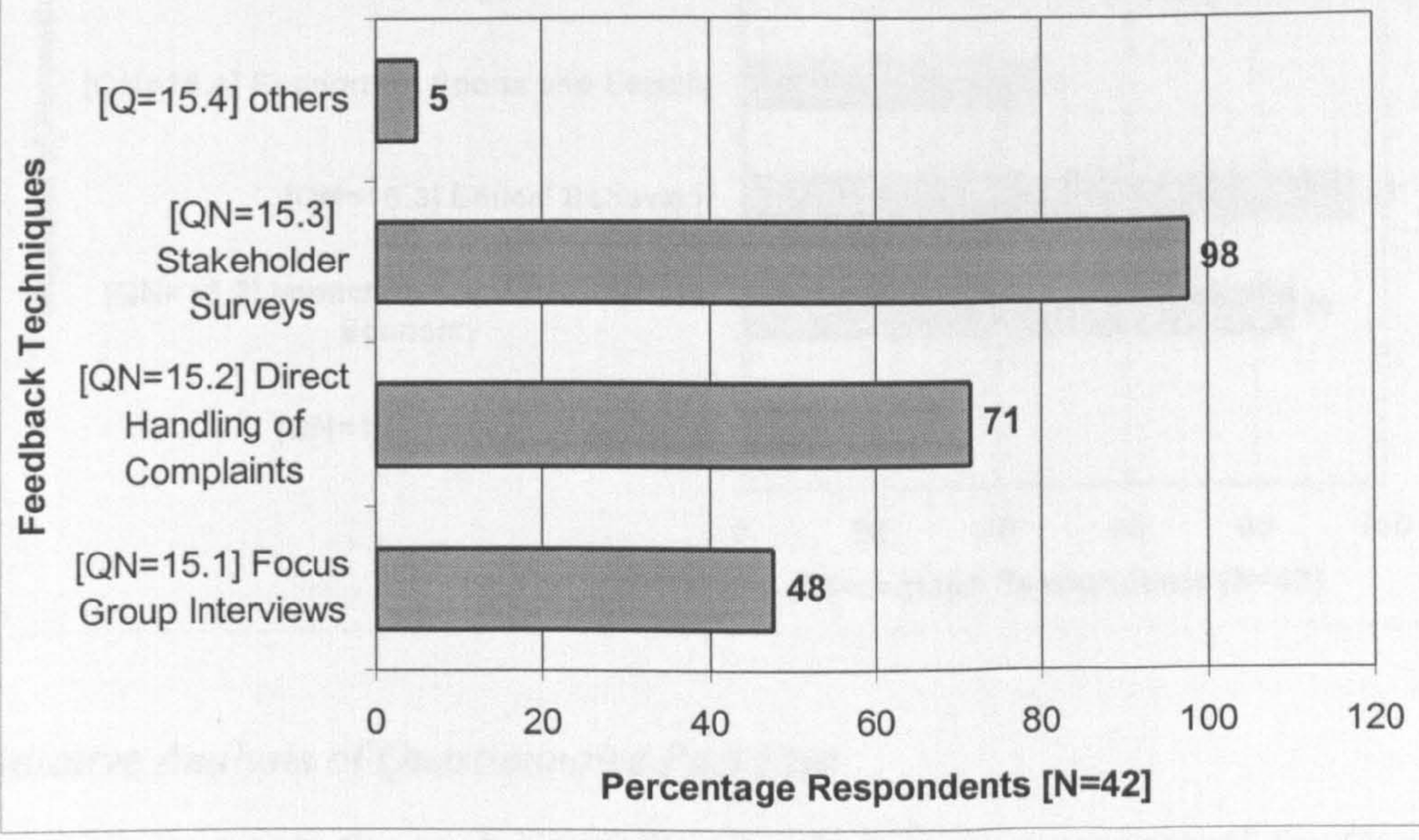
Table 3.22
Commonly Used Measures of Capturing External Stakeholder Perception of Institutional Quality
Source: Based on Questionnaire Part One – Question #14)

QN	Measures of Perception	Percentage Respondents [N=42]	Ranking
14.1	Total Quality Strategy	12	13
14.2	Funding for Infrastructure	100	1
14.3	External Communications Strategy	29	11
14.4	Collaborative Partnerships	86	4
14.5	External Audit of Quality and Performance	98	2
14.6	Research Assessment Exercise (RAE)	86	3
14.7	Teaching Quality Assessment Results	67	7
14.8	Entry Standards	79	6
14.9	Staff-Student Ratios	62	9
14.10	Internal Audit of Quality and Performance	17	12
14.11	First and Second Class Uppers	55	10
14.12	Graduate Destinations	81	5
14.13	Position on the League Table	64	8

Question: #15 – scaled responses – transfer from Questionnaire Part One
Commonly Used Techniques for Capturing Stakeholders' Feedback

Chart 3.22 below, shows that 'stakeholder surveys' are the most common techniques used to capture feedback from key stakeholders including students and staff, followed by 'direct handing of complaints' and 'focus group interviews'.

Chart 3.22
Common Techniques for Capturing Direct Feedback from Students and other Stakeholders
(Source: Based on Questionnaire Part One - Question #15)



Question: #16 – scaled responses – transfer from Questionnaire Part One
Commonly Used Measures of Society's Perception of Quality

Chart 3.23 below, shows the measures commonly used by institutions to capture the perception of the society as a whole about the quality and performance of the participating higher education institutions.

The 'top' three measures are:

(1) Ethical Behaviour;

(2) Impact on the local and national Economy;

(3) Anti-pollution Policies and Strategies.

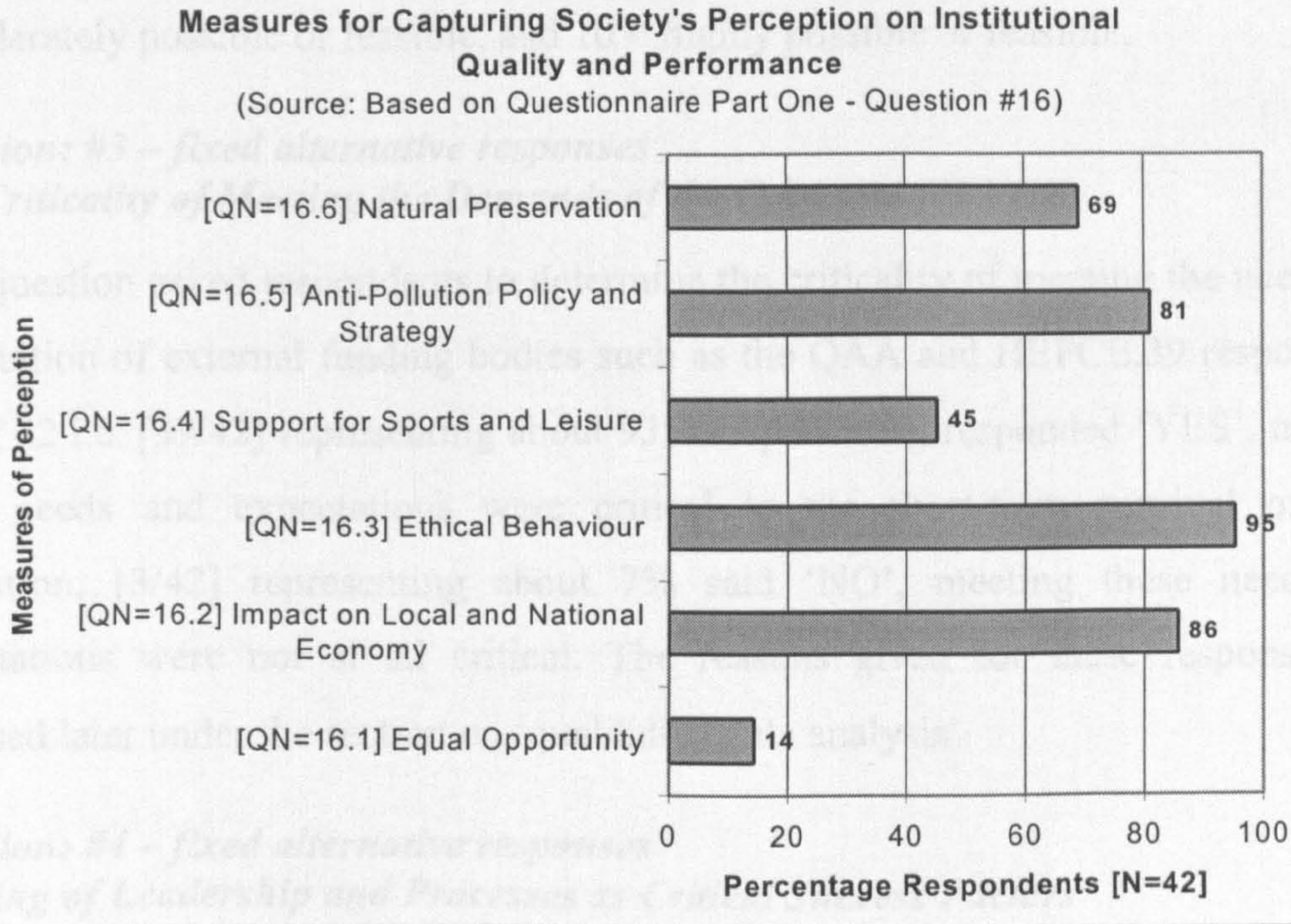
The 'bottom' three measures are:

(4) Preservation of Natural Resources;

(5) Support for Sports and Leisure; and

(6) Equal Opportunity.

Chart 3.23
Measures for Capturing Society's Perception on Institutional Quality and Performance
(Source: Based on Questionnaire Part One - Question #16)



Quantitative Analysis of Questionnaire Part Five

This section, presents the analysis of the 'fixed alternative responses' for Questions: #1, #3, #4, and #5; and of the 'scaled responses' to Questions: #2, #6 and #7. Presentation of the results of the analysis in the form of charts were deem 'not necessary' in this section – since the outcomes expressed in percentage terms are self-

explanatory, and the implications for quality management in higher education will be reflected on in Chapters Four which discusses the empirical results.

Question: #1 – fixed alternative responses
Identifying Areas for Integration in UK Higher Education Institutions

This question asked respondents to identify higher education activities or functions that, needs to be integrated for improved quality and performance. 41 out of 42 i.e. [41/42] representing about 98% respondents said academic, administrative and support-service areas ought to be integrated; only one respondent i.e. [1/42] representing about 2% respondents said academic areas only needs integration.

Question: #2 – scaled responses
The Possibility and Feasibility of Integrating Academic and Non-academic Areas

In the opinion of 30 out of 42 respondents, i.e. 71%, it is 'highly possible' – as shown by the average score of 7 out of 10 points - to integrate 'academic' and 'administrative' functions; however, about 33% i.e. 14 out of 42 respondents thought that such integration was 'highly feasible'; where 1 = not at all possible or feasible, 5 = moderately possible or feasible, and 10 = highly possible or feasible.

Question: #3 – fixed alternative responses
The Criticality of Meeting the Demands of the QAA and HEFCE

This question asked respondents to determine the criticality of meeting the needs and expectation of external funding bodies such as the QAA and HEFCE.39 respondents out of 42 i.e. [39/42] representing about 93% respondents, responded 'YES', meeting these needs and expectations were critical to the short-term survival of their institution; [3/42] representing about 7% said 'NO', meeting these needs and expectations were not at all critical. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #4 – fixed alternative responses
Ranking of Leadership and Processes as Critical Success Factors

This question asked respondents to rank 'leadership' and 'processes' in terms of their relative criticality in effecting real improvements in quality and performance in higher education. 5 out of 42 i.e. [5/42] representing about 12% respondents, ranked 'leadership' first to 'processes'; 12 out of 42 i.e. [12/42] representing about 29% ranked 'leadership' second to 'processes'; the majority i.e. about 25 out of 42 [25/42] representing about 60% respondents thought that 'leadership' and 'processes' are

more effective when integrated into one factor. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #5 – fixed alternative responses
Deciding the Premise for Quality Improvement in UK Higher Education

This question asked respondents to decide the basis for a premise, which should drive and sustain quality and performance improvement in UK HEIs. 20 out of 42 respondents [20/42] representing about 48% respondents choose 'leadership' first to 'processes' and 'level of funding'. 21 out of 42 respondents i.e. [21/42] representing about 50% choose 'processes' first to 'leadership', and 'funding'. No one selected 'funding'; and only one respondent thought all three ought to be integrated. The reasons given for these responses are analysed later under the section on 'qualitative data analysis'.

Question: #6 – scaled responses
Evaluating Appropriateness of Proposed Quality Model Structure

This question asked respondents to offer their opinion on a proposed Theoretical Quality Model Structure for UK HEI. 8 out of 42 respondents [8/42] representing about 19% respondents thought the proposed 'structure' to a 'small' extent depicted all the critical success factors in UK higher education. 27 out of 42 respondents [27/42] representing about 64% thought the proposed structure to a 'large' extent depicted all the critical success factors. The remaining 7 out of 42 respondents i.e. about 17% respondents, thought the proposed structure to a 'great extent' depicted all the critical success factors in UK higher education.

Question: #7 – scaled responses
Evaluating the Pictorial Representation of the Proposed Quality Model Structure

This question asked respondents to evaluate the diagrammatic representation of the proposed quality model structure in Question #6 above. 15 out of 42 respondents [15/42] representing about 36% respondents thought the 'diagram' does not 'satisfactorily' represent the suggested structure. 24 out of 42 respondents [24/42] representing about 57% thought the diagram was 'satisfactory' and remaining 3 out of 42 i.e. about 7% respondents thought the diagram was 'excellent'. The reasons given for these responses are analysed later under the section on 'qualitative data analysis' using inductive methods of analysis.

B. Qualitative Analysis of Responses to Questionnaire

Primary Qualitative Data are represented here as 'narratives', 'non-numerical' or descriptive accounts offered as 'reasons' for choosing a 'fixed alternative response' or a direct response to an 'open-ended' question. As would be expected, the order of the 'inductive analysis' is in 'parts', starting with Questionnaire Part One.

Qualitative Analysis of Questionnaire Part One

An Inductive Method of analysing textual material' based on 'contents' analysis, is used here to analyse the 'reasons' for selecting the 'fixed alternative response' for Questions: #2, #4, #6, #9 and #11; and the responses to the open-ended Questions: #8, #10.

Question: #2 – Job Descriptions

Majority of respondents i.e. [33/42] representing about 79% said 'NO' they do not have a formal job description. Inductive analysis of the reasons for the 'no' responses, suggest that formal structures for implementing quality improvement policy and strategy may be weak. This is what a respondent from an 'oxbridge' institution said:

> *"I joined the university first as an administrative officer, and was given a Job Description to that effect, which detailed, what I was to do as an administrator in support of academic activities. At the time I was not given specific responsibility in the area of academic quality. The additional responsibility for teaching quality came about following my promotion to Senior Administrative position, which was communicated to me via memos, notes, reports, and minutes of meetings, but not through a formal job description" (Oxbridge University Respondent #1)*

The above response identifies the interface between administrative and academic functions, which according to Kogan (1999) needs to be effectively managed in support of academic quality improvement.

Question: #4 – Structure for Quality Management

Few respondents i.e. [4/42] representing about 10% said 'NO' they do not have a dedicated division or department solely responsible for quality management. Inductive analysis of reasons for saying 'no' suggest that, a few of the participating institutions do not have dedicated structures at the institutional level for implementing quality improvement policy and strategy. This is what a respondent from an 'oxbridge' institution has to say:

> *"We do not have a dedicated division within the university responsible for quality management, but we do have dedicated Quality Teams, Circles or Committees with well-defined responsibilities. For example: there is The Academic Quality Committee at top management level, responsible for*

strengthening External Relations with Quality Assessment Agencies, such as the Quality Assurance Agency (QAA); and Quality Teams at the operational levels, responsible for implementing teaching and research quality improvement strategies." (Oxbridge University Respondent #1)

This response appears to suggest there is movement towards a 'structure-less' approach to the organisation of academic quality improvement activities, involving staff with all discipline and from different departments.

Question: #6 – Effectiveness of Internal Communication

5 out of 42 respondents i.e. [5/42] representing about 12% said 'NO' they did not know their schools most recent QAA Score. Inductive analysis of reasons for saying 'no' suggest that these respondents may not be directly responsible for QAA affairs. There appears to be a timing element involved in the process of communicating feedback on the outcome of processes. This is what a respondent from an 'oxbridge' institution has to say:

"Not Yet, perhaps because, I'm not directly concerned with the output side of Teaching Quality Improvement, but with the inputs and aspects of processes. I get to know the results eventually, but from my point of view it is not a critical issue in my decision-making process" (Oxbridge University Respondent #1)

By reference to 'inputs', 'processes', and 'outputs', this respondent's perception of teaching quality improvement may be described as a perception based on systems thinking.

Question: #8 – Definition of Academic Excellence

Inductive analysis of the definition given by 42 respondents of 'academic excellence' identified two schools of thought about 'academic excellence'. The first group of respondents saw 'academic excellence' as an *aspirational* target that can never be achieved. The second group saw it as an *achievable* target linked to 'best-in-class' performance results; that can be achieved if quality improvement objectives and targets are realistic enough. What the two schools of opinion have in common is the recognition that 'sustaining quality improvement' is the means by which the 'aspirational' and 'achievable' targets can be made relevant in a higher education environment. A respondent from an 'oxbridge' institution gave the following definition of 'academic excellence':

"It represents the efforts made by institutions to achieve sustainable levels of best-in-class performance results in academic and non-academic areas" (Oxbridge University Respondent #2)

The above definition appears to suggest that, sustaining excellent performance levels would require integration of academic and non-academic quality improvement policies and strategies.

Question: #9 – Impact of QAA on Internal Quality Management

30 out of 42 respondents i.e. [30/42] representing about 71% said 'NO' they did not think that the QAA's Model has brought about 'significant' internal quality improvement; 10 out of 42 respondents i.e. [10/42] representing about 24% said 'YES', the Model has brought about 'significant' improvement in quality in their institution. Inductive analysis of reasons for these responses suggest that those who said 'NO' thought that the model was too prescriptive and led to game-playing. Those who said 'YES' thought there would not have been any improvement had the Model procedures not been introduced. Two respondents from the 'NO' and 'YES' camps – represented by an 'oxbridge' and 'polytechnic' institutions respectively - have to this to say:

"We are 'excellence' this is evident from our historical development; apart from the link with funding allocations, the QAA Process is a mere waste of time and resources" (Oxbridge University Respondent #4)

"The quality of provision and standards of awards would have declined dramatically if QAA processes were not introduced, we have seen significant improvement in our Teaching Grants and have been able to sustain our student numbers - including students form overseas - over the past 3-5 years" (Post-1992 University Respondent #42)

These two statements suggest that, 'old' universities seem more confident about the relative effectiveness of their internal quality improvement processes than 'modern' universities.

Question: #10 – Strengths and Weaknesses of the QAA Model

The inductive analysis of the 'strengths' and 'weaknesses' listed by the 42 respondents suggests that the key 'strengths' of the QAA Model include: (1) without it some institutions would not have cared about improving the quality of provision and standards of awards; (2) Excellent Results strengthened institutional links with external stakeholders, in particular the Government. The key 'weaknesses' include: (1) It is too prescriptive when it comes to 'process improvement' leading to higher cost of bureaucracy; (2) It is yet to evolve into an effective approach to strategic quality management, at the moment, it is less preventive in design; (3) The process of operationalizing new versions of the model, is too time consuming, and have led to

frustration among academic staff who would rather be teaching or doing research. A respondent from an 'oxbridge' institution (Oxbridge University Respondent #5) listed the following 'strengths' and 'weaknesses':

Strengths:

1. Increased awareness of quality among academic and non-academic staff;
2. Encourages Continuous Process Improvement;
3. Provides a rational basis for Funding Allocations;
4. Improvement in External Relations with External Stakeholders.

Weaknesses:

1. Too prescriptive with respect to 'process improvement' procedures;
2. Too much emphasis on 'processes' and 'outputs' at the expense of 'inputs';
3. Too much emphasis on after the event assessment of quality;
4. It is more about assurance and not really about 'management' and 'transformational change'.

The above list of strengths and weaknesses suggests that, this respondent see the QAA's process of rationalising Funding Allocations as being 'retrospective' rather than 'prospective'.

Question: #11 – The QAA Model and the Evolution of Total Quality Management

41 out of 42 respondents, i.e. [41/42] representing about 98% respondents thought the QAA Methodology relative to the stages of evolution of Strategic or Total Quality Management (TQM) concepts, is essentially at the basic stage of evolving into an effective approach to quality management. A respondent from an 'oxbridge' institution gave the following reason:

"The procedures adopted by the QAA Model are essentially 'inspection-based' regimes. The Model is however evolving slowly into a prevention-based approach in some departments or colleges in my university" (Oxbridge University Respondent #1)

Inductive analysis of the reasons offered by respondents - including the one above - suggest that the QAA Model needs to evolve along the lines of strategic quality management principles, to make it more relevant and useful as a change initiative in UK higher education institutions.

Qualitative Analysis of Questionnaire Part Three

An Inductive Method of analysing textual material' based on 'contents' analysis, has been used to analyse the 'reasons' given by respondents for selecting the 'fixed alternative response' for Questions: #4, #5, and #6.

Question: #4 – Paying for the Benefits Derived from Higher Education

27 out of 42 respondents, i.e. [27/42] representing about 64% respondents responded 'YES', that stakeholder groups who benefit the most from the provision of higher education should be made to pay for the benefits derived in amounts proportionate to the benefits derived. 14 out of 42 i.e. [14/42], representing about 33% said 'NO', payments should not be proportionate to benefits derived. These is what two respondents from both camps representing 'oxbridge' and 'post-1992' institutions have to say – first the 'NO' camp, then the 'YES' camp:

"Post-1992 institutions are community-based and teaching and learning oriented compared with Pre-1992 institutions, which pride themselves on research excellence, elitism and maintenance of the status quo. This means we tend to sympathise more with students from poorer backgrounds who cannot afford to pay for the full cost of higher education at the economic rate – without Government Funding and Support." (Post-1992 University Respondent #42)

"We have a track record of teaching and research excellence because of our diversified sources of funding some of which comes from parents of students who can afford, and organisations who sponsor their students for world-class research, mainly in the pure sciences, engineering and medicine. We cannot afford to be sympathetic were money is concerned. We urgently need the money to maintain our high quality and standards of awards; indeed, our national and international reputation is at stake" (Oxbridge University Respondent #3)

Inductive analysis of the reasons offered by respondents - including the two respondents above - suggests that, those in the 'YES' camp believe that, the QAA model in the long-term needs to evolve along the lines of strategic quality management principles. This is necessary if it is to meet the long-term social and economic expectations of the government, students, employers and society as a whole. Those in the 'NO' camp, however seem to argue from a short-term perspective, with a direct link to the economic hardship faced by excellent students from low-income families.

Question: #5 – Using Profits for Commercial Ventures for Quality Development

15 out of 42 respondents, i.e. [15/42] representing about 36% respondents said 'YES', publicly funded higher education institutions ought to be allowed to set up businesses; with capital from various stakeholders. The profits earned from the commercial venture should then be spent on internal quality development. 27 respondents out of 42, however, either said 'NO' or 'DO NOT KNOW', suggesting the controversial nature of the strategic issues involved in public sector institutions seeking private sector participation in funding higher education. This is what the 'YES' and 'NO'

respondents from the opposing camps have to say - they are respectively, represented by a respondent each from an 'oxbridge' and a 'post-1992' institution:

"This is largely the case in Private Sector Higher Education Institutions, particularly in the USA. In publicly funded institutions, if these were to happen on a large-scale, some institutions will benefit more than others, and the Government will become more selective in its funding allocations. Yes, it is generally a good thing, if the Government remains the main funder and employer of graduates in the public sector." (Oxbridge University Respondent #2)

"There is a serious danger of Government funding being withdrawn, many of Post-1992 institutions with weak financial base will go out of business, few may be encouraged to go private. In the very long-term, the mission of higher education will be undermined with negative impact on the quality of provision and standards of awards." (Post-1992 University Respondent #42)

Inductive analysis of the reasons offered by respondents - including the two above - suggests that, the those in the 'NO' camp think the mission of higher education will eventually be compromised. Those in the 'YES' camp think private sector participation will make institutions more accountable and make higher education more relevant to today's knowledge-based economy.

Question: #6 – Predictability of Shifts in Government Funding Policy

27 out of 42 respondents, i.e. [27/42] representing about 64% respondents predicted an 'increase' in government's expenditure on higher education; with 11 out of 42 respondents, i.e. [11/42] representing about 26% respondents, predicting a 'decrease' in funding. This is what the 'INCREASE' and 'DECREASE' camps have to say - respectively represented by a respondent each from an 'oxbridge' and a 'post-1992' institution:

"It is politically expedient for governments to want to be seen 'increasing' expenditure on Higher Education in order to get the vote to come into power or remain in power, as the case may be. That said, whatever the increases may be, they may just not be enough to cover the full cost of higher education to both students and institutions." (Oxbridge University Respondent #2)

"From an economic perspective, 'decrease' in funding will continue to be the policy of successive UK Governments, because of the need to control Public Expenditure." (Post-1992 University #40)

Inductive analysis of the reasons offered by respondents - including the two examples above - suggests that those predicting a 'rise' in government spending see it as politically expedient do to do. However, those predicting a 'decline' see the need to control public expenditure as the main concern of the government in the long-term management of the economy.

Qualitative Analysis of Questionnaire Part Four

An Inductive Method of analysing textual material' based on 'contents' analysis, is used here to analyse the 'reasons' for selecting the 'fixed alternative response' for Questions: #3, #4,and #5.

Question: #3 – The Link Between Staff Performance Indicators and Rewards

6 out of 42 respondents, i.e. [6/42] representing about 14% respondents 'YES', in practice they have established a link between 'staff performance indicators' and 'staff reward systems'; with a massive 35 out of 42 respondents, i.e. [35/42] representing about 83% respondents, who responded 'NO', there is no serious attempt to improve these linkages even where they exist. This is what the 'YES' and 'NO' camps have to say - respectively represented by a respondent each from an 'oxbridge' and a 'post-1992' institution:

"We work on the basis that there is a causal relationship between staff performance indicators and rewards. The indicators are in the form of outputs e.g. Number of Publications Per Year; and rewards by way of promotions or increased privileges including increased number of attendance at international conferences etc." (Oxbridge University Respondent #2)

"We see the linkages as theoretical because they are simply difficult to sustain, lack of adequate funding means, discussion of the linkage is not encouraged very much because it generates a lot of passionate debates about fairness and equity." (Post-1992University Respondent #40)

Inductive analysis of the reasons offered by respondents - including the two above - suggest that those who said 'YES' did so as part of their staff retention strategy. In contrast, respondents who said 'NO', acknowledge that the linkage exist at the human resources policy level, but lacks the strong leadership required to maintain its continuous implementation.

Question: #4 – Impact of Widening Participation on Entry Standards

6 out of 42 respondents, i.e. [6/42] representing about 14% respondents were of the view that the Government's widening participation agenda, has led to a 'DECLINE'' in Entry Standards; in contrast, 35 out of 42 respondents, i.e. [35/42] representing about 83% respondents, said the pursuit of widening participation has led to the maintenance and in some departments the raising of Entry Standards. This is what the 'DECLINING' and 'IMPROVING' camps have to say - represented by a respondent each from an 'oxbridge' and a 'post-1992' institution:

"Most in departments in my school have cash problems; even though they do not openly admit lowering Entry Standard into order to maximise their funding allocations for teaching, that is the case

in practice, and I'm not going to say that is what we turn to do. I leave you to make your own judgement." (Post-1992 University Respondent #39)

"To maintain our international competitiveness top academic leadership is directly involved in ensuring that Entry Standard are maintained and even improved. We are continuously fighting to maintain our international reputation for research and teaching excellence." (Oxbridge University Respondent #5)

Inductive analysis of the reasons offered by respondents - including the two above examples - suggest that where there has been a 'DECLINE'; Entry Standards have been lower in order to obtained targeted number of students. In contrast, where Entry Standards have been maintained and improved strong academic leadership was required to ensure that rules were not bent in favour of students with lower Entry Standards, because it tended to create more problems than it solves.

Question: #5 – The Gap Between Entry Standards and Standard of Awards

5 out of 42 respondents, i.e. [5/42] representing about 11% respondents thought the perceived gap in 'Entry Standard' and 'Standard of Awards' is 'WIDENING'; whereas 34 out of 42 respondents, i.e. [34/42] representing about 81% respondents, thought the 'gap' was 'NARROWING'. This is what the 'WIDENING' and 'NARROWING' camps have to say - respectively represented by a respondent each from an 'oxbridge' and a 'post-1992' institution:

"We have no short-term and long-term interests in helping to widen the 'gap' between Entry Standards and Standards of Awards." (Oxbridge University Respondent #2)

"There is enormous pressure from Government to be seen to be doing whatever is reasonably possible to widen participation. However, not all departments are handling these pressures very well. It is better handled in the sciences than in non-sciences" (Post-1992 University Respondent #40)

Inductive analysis of the responses - including the two examples above - seem to suggest that, those who thought the 'gap' was 'widening' were perhaps lowering Entry Standards; whereas those who thought the 'gap' was 'narrowing' were perhaps doing every thing possible to maintain Entry Standards and therefore the Standard of Awards.

Qualitative Analysis of Questionnaire Part Five

An Inductive Method of analysing textual material' based on 'contents' analysis, is used here to analyse the 'reasons' for selecting the 'fixed alternative response' for Questions: #1, #3, #4, #5 and #7.

Question: #1 – Possible Areas for Integration

41 out of 42 respondents, i.e. [41/42] representing about 98% respondents said academic, administrative and support-service areas ought to be integrated. This is what a respondent from a 'polytechnic' institution has to say:

"All three areas (academic, administrative, and support-service) are critical for sustaining academic quality improvement" (Post-1992 University Respondent #42)

Inductive analysis of the reasons offered by respondents - including the example above - suggest that, they saw integration as a critical factor for sustaining continuous improvement in quality and performance through efficient use of scarce resources in a higher education environment.

Question: #3 – Criticality in Meeting the Needs and Expectations of the QAA and HEFCE

39 out of 42 respondents, i.e. [39/42] representing about 93% respondents thought that meeting the needs and expectations of the Quality Assurance Agency (QAA) and the Higher Education Funding Council (HEFCE) is very important. A respondent from an 'oxbridge' institution puts it this way:

"If the requirements of the QAA and HEFCE were not linked to Government Funding, most of us would not have bored much about their existence. We have to protect our public image by being seen to be doing something about quality; this however, has led to game playing with these agencies." (Oxbridge University Respondent #4)

Inductive analysis of the reasons given by respondents - including the above example - suggest that meeting the needs and expectations of the QAA and HEFCE is seen as short-term obligations with long-term implications on the image of the institution in the eyes of the general public.

Question: #4 – Sustainable Critical Success Factors

5 out of 42 respondents [5/42] i.e about 12% respondents ranked 'LEADERSHIP' first to 'PROCESSES'. 12 out of 42 respondents [12/42] representing about 29% respondents ranked 'PROCESSES' second to 'LEADERSHIP'; whereas 25 out of 42 respondents, i.e. [25/42] representing about 60% respondents, rank the 'two factors' as equally important when integrated. This is what three respondents had to say:

"Effective Managerial Leadership is key to maintaining our track record of maintaining a culture of higher quality and standards as the means for sustaining academic excellence.(Oxbridge University Respondent #6)

"The QAA and HEFCE Models are 'PROCESS' Models. As such the more institutions are compelled to comply with their requirements without serious attempts by institutions to integrate these models into their own internal mechanisms, there is the danger that conceptually many practitioners will continue to rank 'processes' first to 'leadership' in the UK" (Post-1992University Respondent #40)

"Leadership and Processes on their own are not effective in bringing about and sustaining Quality Improvement. They are more effective when integrated, and in situations where the Process is owned by a Leader, improved Leadership brings about improved Processes; and the delivery of Quality Teaching and Research" (Post-1992 University Respondent #42)

The inductive analysis of the reasons for suggesting an integration of 'leadership' and 'processes' suggest that respondents - including the three above - thought it will help identify areas of synergy and encourage process ownership for sustained improvement. Respondents who ranked 'processes' first to 'leadership' thought they have be influenced by years of adopting the QAA and HEFCE Models which explicitly places emphasis on 'processes'. Those who ranked 'leadership' first to 'processes' did so not because that was the case in their institutions but because they are aware of the strategic role of leadership in quality improvement.

Question: #5 – Premise underpinning Models for Sustaining Quality Improvement

20 out of 42 respondents, i.e. [20/42] representing about 48% respondents thought the premise for sustaining quality improvement ought to be based on 'leadership'; whereas 21 out of 42 respondents, i.e. [21/42] representing 50% respondents, thought the underlining premise should be based on 'processes'. This is what respondents from two institutions have to say:

"As a science-based department, our success is based on precision and certainty, we need to know who our leaders or quality champions are for direction, drive, inspiration, motivation, and reward for our efforts. We need a Leader to sustained Process Improvement and not the other way round" (Oxbridge University Respondent #4)

"We see Process Improvement as central to our operations, because we are in a situation were it is very difficult for us to retain leadership at all levels for a very long period. We do not have enough funds to support serious quality development. Leaders come and go, but Processes are constant; it is our strategic responsibility to ensure that processes are improved and well documented – irrespective of who is in a leadership position " (Post-1992 University Respondent #40)

Inductive analysis of the reasons given by respondents - including the two above - for these choice, suggest two schools of thought; first, the 'leadership-process' school based on a formal rigid hierarchical structures for quality management - illustrated by the oxbridge respondent #4. Second, the 'process-leadership' school of thought based on less formal flexible structures, that responds quickly to changes in the internal, external and competitive environments in which institutions operate in - as illustrated by the post-1992 university respondent #40.

Question: #7 – Pictorial Representation of Proposed Model for Higher Education

15 out of 42 respondents, i.e. [15/42] representing about 36% respondents thought the proposed diagram was 'NOT SATISFACTORY'; whereas 24 out of 42 respondents, i.e. [24/42] representing about 57% respondents, thought the diagram was 'SATISFACTORY'. Two respondents has this to say:

"This diagram is not satisfactory, because not all the terminology is well understood by academic staff responsible for quality. For example – What is Best Practice?" (Oxbridge University Respondent #2)

"This is a smart diagram and has strong selling points:
(1) It takes into account the impact of internal and external factors in the audit process;
(2) It shows leadership and processes as the foundation for best practices
(3) the arrows spreading out appear to suggest successful application of best practices in both internal and external audit procedures." (Oxbrdige University Respondent #5)

Inductive analysis of the reasons for the responses - including the two examples above - suggest that, those who thought the diagram was 'not satisfactory' did so because not all the critical success factors for sustaining quality improvement were shown in the diagram. However, those who thought it was 'satisfactory' did so because they thought that from a broad or strategic perspective, the diagram may best be described as a 'level one' representation of data and information; as such lower levels of representation will be needed for further clarification.

C. Pool of Critical Success Factors Derived from Analysis of Questionnaires

Appendix C3b shows the results of analysing the responses to the 69 questions in the Questionnaire, which led to the creation of the pool of 64 critical success factors. Table 3.23 below shows the categorisation of these factors into 'Eight Generic CSFs' and a number of 'Specific CSFs' – relating to academic, administrative and support-service functions - based on a pre-coding system developed from the literature.

Table 3.23
Categorisation of Critical Success Factors
Source: Based on Response to Questionnaire Survey

No.	Generic Critical Success Factors	Specific Critical Success Factors		
		Academic	Administrative	Support-Services
1	Effective Managerial Leadership	Teaching; Learning; Research; Scholarship; Student Assessment; Enrolment; Reference Facilities; Conferences.	Facilities; Students Complaints; Students Feedback; Enrolment; Students Finance; Staff Recruitment.	ICT Infrastructure; Library Facilities; Sports and Leisure; Staff and Student Accommodation.
2	Information, Knowledge Management			
3	Funding, Resources, Collaborations			
4	Staff Planning, Results, Rewards			
5	Framework of Core Processes			
6	Students as Customers Results			
7	Government and other Stakeholders Results			
8	Institutional Performance Results			

3.2.2. Qualitative Analysis of Semi-Structured Interview Transcripts

The inductive technique for analysing the interview transcripts has been described in detail earlier in this chapter under Section [3.2]. The responses to broad and specific interview questions under each interview theme are provided below in the case of a total of 39 interviews conducted in the United Kingdom and in the United States of America. The inductive analysis of the response to these questions led to the creation of the Pool of 'weak', 'good', and 'best' Practices shown under Appendix C4. The primary aim of the results from the US is to inform quality management practices in the UK, and not for a detailed comparative analysis to be made – this will require a much wider sample of interviews with different US higher education institutions.

A. Analysis of Responses to Broad or Generic Interview Questions

A number of key questions have been selected for analysis under each theme; specific questions relating to each broad question, are analysed later under sub-section B. For each question the view of experts in both the UK and US are given to help identify any areas of similarity or difference. The implications for quality management in UK higher education institutions in general and in particular in participation institutions will be discussed under Chapter Four.

Theme#1 – Best Practices for Excellence

This theme deals with the notion of 'best practices' and how it relates to the 'concept' of excellence in higher education. The main question to be analysed is:

Broad Question: #1 – Meaning and Relevance of Best Practices
How would you define 'Best Practice' in the Context of Higher Education?

In response to the above question two interviewees from the UK and US said:

"Since the notion of 'best practice management' is still evolving' more needs to be done to educate and train academic staff in its use. Current literature in the UK shows that, 'Good Practice' is interchanged with 'Best Practice', however, what we are doing is to emphasis the importance of transformational leadership in further developing 'good practices' until they become 'best practices' capable of delivering world-class or best-in-class performance results" (UK Interviewee #1)

"There is still a debate amongst academics and administrators about whether to use the term 'Good Practice' or 'Best Practice'. There are those who say we ought to move from 'good' to 'best' because the latter is directly linked to 'excellence' and it is 'aspirational'. Those who want to maintain the use of 'good' wish to do so because it creates less misunderstanding in the use of appropriate terminology. My own view is that the concept of 'best practice management' is essentially contextual and evolving and needs experts to explain its meaning and relevance to staff for effective implementation. We have successfully operationalised Academic Excellence through Best Practice implementation " (US Interviewee #1)

Inductive analysis of the interview transcripts - including the two interviewees above - suggests that, majority of interviewees in the UK and US agree that:

- *Best Practices are practices that deliver best-in-class or world-class performance results;*
- *From a philosophical point of view, aiming to be the 'best' provides a stronger incentive for improvement than merely aiming to be 'good'';*
- *Context is critical, because, there is no single 'best' quality management practice;*
- *Transformational managerial leadership is required to develop 'Good' practices into 'Best' practices - the use of the appropriate terminology is important.*
- *Best Academic Practices underpin Academic Performance Excellence*

Theme#2 – Evaluation of Best Practices for Academic Excellence

This theme deals with the set of criteria for evaluating a 'best practice' for sustaining academic quality improvement. The main question to be analysed is:

Broad Question: #2 – Evaluation of Best Practices
What criteria do you use to evaluate 'Best Academic Practices'?

In response to the above question two interviewees from the UK and US said:

"A 'YES' response to all the above questions, supported by documentary evidence of practice, would suggest that a particular quality management practice is relatively highly important and highly effective in delivering long-term success. It is indeed a common sense approach to quality assessment, measurement, improvement, and management. It encourages organic development of quality in academia." (UK Interviewee #2)

"If a practice is deemed 'not important' then there is no need to spend time and money implementing it; if a practice is 'not effective' in delivering stated quality improvement objective – why implement it? The fact is that, in publicly funded institutions there is empirical evidence of game-playing, because of poor incentives or lack of it, and the level of competition among institutions is not that high and sustainable." (US Interviewee #2)

Inductive analysis of the interview transcripts - including those of the two interviewees above - suggests that, majority of interviewees in the UK and US agree that, from an 'inductive' point of view, a set of evaluation criteria linked to 'relative importance' and 'relative effectiveness' of a practice may be used. The set of criteria – expressed by most interviewees in the form of questions - for evaluating the 'relative importance' and 'relative effectiveness' of a quality management practice include:

Relative Importance of a Practice:

- *Is the link between the practice and strategic quality improvement objectives very strong?*
- *Is everyone actively involved in sustaining a work environment, which encourages the practice?*
- *Are staff recognised and rewarded for their effort in sustaining the practice?*

Relative Effectiveness of a Practice:

- *Is the practice consistent with mission, vision, values, principles, policy, strategy and objectives?*
- *Is the practice cost-effective in meeting the needs of students and potential employers?*
- *Does the practice meet the short-term financial obligations of the institution on continuous basis?*

Theme#3 – Stakeholders for Sustaining Academic Excellence

This theme deals with the need and expectations of key stakeholders, and how they relate to the efforts to achieve and sustain academic excellence. The main question to be analysed is:

Broad Question: #3 – Evaluating Stakeholder Power, Contribution and Interests. How have you being able to deal with the varied interests and power of different stakeholders in order to maximise their financial contribution to your institution?

This is what two interviewees from the UK and US have to said about the 'first' and 'second' schools of thought:

First School of Thought:

"The needs and expectations of stakeholders with short-term and long-term 'interests' should be harmonised, effectively integrated, and prioritised on the basis of relative 'power' to influence the strategic direction of higher education, and their relative ability to make significant financial 'contribution' to quality development". (UK Interviewee #3; US Interviewee #3)

Second School of Thought:

"The needs and expectations of stakeholders with short-term 'interests' should be harmonised, effectively integrated, and prioritised on the basis of relative 'power' to influence the day-to-day operational decisions of higher education, and their relative ability to make significant financial 'contribution' to quality development"(UK Interviewee #4; US Interviewee #4).

Inductive analysis of the interview transcripts - including those above - suggests that, there are two schools of thought on how to balance the varied 'interests' and 'power'

of stakeholders, in order to maximise the financial and non-financial contribution derived from them in support of continuous academic quality development.

Theme#4 – Performance Measures for Academic Excellence

This theme deals with the debate on the 'continuous' relevance and usefulness of performance 'measures', 'indicators' and 'management' in higher education, in relation to achieving and sustaining teaching and research excellence. The main question to be analysed is:

Broad Question: #4 – Relevance and Usefulness of Performance Measures. What is your take on the continuous relevance and usefulness of performance measures in Higher Education?

In response to the above question two interviewees from the UK and US said.

"There is no doubt performance measures, indicators and management provide a rational basis for evaluating performance of individuals and institutions. The danger is how to effectively manage situations where evaluations do not lead to significant improvement in individual and institutional performance results. Lack of real improvement may lead to 'performance improvement' fatigue" (UK Interviewee #5)

"We find the use of performance measures and indicators very useful, and they form the basis of our Strategic Quality Planning and Assessment. We have a set of measures and indicators carefully evaluated and implemented, through a well documented process. The direct link with funding and other resource acquisition means we have a strong incentive for maintaining and improving on our system of performance management. We have achieved significant success over the past 20-30 years of practice. Performance measures, indicators and the whole process of management are strategically relevant and useful for sustaining academic excellence" (US Interviewee #5)

Inductive analysis of the interview transcripts - including the transcripts from the two interviewees above - suggests that, majority of interviewees in the UK and USA are of the view that, higher education institutions publicly funded should be more 'accountable' for the moneys they receive from the taxpayer. This makes the use of performance measures as the only basis of deciding funding allocations, more and more relevant and useful. Most interviewees argued that, there ought to be a threshold for a minimum level of quality linked to a minimum level of funding to encourage continuous development of quality.

Theme#5 – Development of Academic Excellence Models

This theme deals with how to depict 'critical success factors' underpinning academic excellence in a diagrammatic form to give an impression of 'holism' and 'integration'. The main question to be analysed is:

Broad Question: #5 – Alternative Model Infrastructure
How would you diagrammatically represent the Structure of a Model for Academic Excellence?

The response from two interviewees from the UK and US are stated as follows.

"The strength of the EFQM Excellence Model is that it is based on systems thinking...its weakness is that it does not specifically address the Quality of Teaching and Research (UK Interviewee #6)

"One of the strengths of the recently introduced Educational Version of the MBNQA Excellence Model is that it is based on systems thinking, and attempts to address Quality in Education (US Interviewee #6)

Inductive analysis of the interview transcripts - including those of the above two examples - suggests that, majority of interviewees in the UK and USA are of the view that, the model structure should be based on 'systems infrastructure'. They also suggested that, it must include 'feed-back' and 'feed-forward' mechanisms, to make the model responsive to changes in the external environment.

B. Analysis of Response to Specific Research Interview Questions

There are a number of specific questions linked to the broad or generic questions asked during the interviews. Although these questions were generated as the interview progressed, there were considered before the interviewees and listed under Appendices A2 and A4. Five of these questions have been analysed below.

Theme#1 – Best Academic Practice Management

The specific questions under this theme attempts to gather data, information and intelligence on how individual quality managers and their institutions identify, evaluate, select, implement and control academic practices, as basis for sustaining 'best practice management' for academic excellence. The specific question to be analysed is:

Specific Question: #1 – Approach to Best Academic Practice Management
How do you manage the system of 'Best Academic Practices' effectively?

The response to the above question from two interviewees from the UK and US are as follows:

"For a start we have a well documented system of academic practices, which are verifiable; and as part of our induction process for staff, we make them aware of what we consider as 'weak', 'good' and 'best' teaching and research practices. We belief this helps new staff to properly position themselves in a way to deliver further improvements and not to unconsciously adopt 'weak' practices. We have successfully implemented new teaching practices after benchmarking our practices with well-

established departments or schools. We however, have a deliberate strategy of continuous review of practices in order to reduce the cost of bureaucracy (UK Interviewee #7)

"Over the years our academic and administrative practices have improved significantly because we continuously improve on our practices. We Benchmarking internally and external on ad-hoc basis, and seen the techniques as an integral part of our continuous effort to make our academic practices not just 'good' but the 'best' in order to maintain our international competitiveness as a Centre for Excellence in the Material Sciences (US Interviewee #7)

Inductive analysis of the interview transcripts - including those of the two above - suggests that, majority of interviewees in the UK and USA identified two approaches to management of best academic practices. The first approach is 'ad-hoc' and is derived from best practice benchmarking; the second, is 'continuous' and is derived from regular evaluation of practices in order to eliminate teaching and research practices that are less important and less effective in delivering expected results.

Theme#2 – Composite Definition of Quality

The specific questions under this theme attempts to gather data, information and intelligence on the 'possibility' and 'feasibility' of developing a 'composite' definition and 'meaning' of quality in higher education. The specific question to be analysed is:

Specific Question: #2 – Meaning of Quality in Higher Education
What is your take on a 'composite' definition of Academic Quality?

The response to the above question from a UK and US interviewee are state below.

"Quality as Fitness for Purpose is a narrow definitions, but easier to understand and implement if your consider students as customers who should be satisfied and even delighted. A composite definition may be difficult if not impossible to derive; and the assessment of quality based on it may be demanding. There is however, no doubt that, a composite definition if well developed and explained will make the achievement of academic excellence easier – empirical validation will be needed (UK Interviewee #7)

"A composite definition will raise the stacks higher, which is expected when you consider that 'excellence' is an aspirational target. It will reinforce the principles of 'continuous quality improvement'. The downside however, is that people will always see themselves as having a 'deficit' and they need to put in more effort in order to achieve world-class results. It may put institutions and individuals without the resources to do better under enormous pressure leading to de-motivation (US Interviewee #8)

Inductive analysis of the interview transcripts - including the two above - suggests that majority of UK and US interviewees believe it is time to have a more 'holistic' and 'integrated' definition of quality that fits well into academic terminology, instead of over-reliance on commercially derived definitions and meanings. This definition and meaning of quality they believe ought to be based on empirical research, and underpinned by the evolution of quality over the years.

Theme#3 – Stakeholders as Customers

The specific questions under this theme attempts to gather various views on who ought to be regarded as a 'customer' in higher education. The specific question to be analysed is:

Specific Question: #3 – Definition of Customers in Higher Education
Which Stakeholders ought to be treated as customers in higher education?

The response to the above question from two interviewees from the UK and US are given below.

"In publicly funded institutions funding is a critical success factor; as such our specific interest, in the short-term, is how to resolve our liquidity problems. Most International students have their fees fully paid before they set foot on our campus. Home Students, sponsored by world-class organisations are also a good source of cash. Funding from Government sources takes a long time to process, meanwhile we need to get our operations off the ground come September (UK Interviewee #8)

"Even though we are registered as a 'state' institution, we have both private and public sector participation in funding our activities. We have however been careful not to change our overall mission as a 'public' institution – the private participation is for the 'money' and the public participation is for 'quality service' for all. We need 'hard' cash, which the government and big business alone can provide; but the services are for the general public interest. Our specific interest is to find ways of maximising funding from key stakeholder who have the money, and our general interest our reason d'etre is to serve the public good including the needs and expectations of our key funders. This is the foundation on which we have been able to sustain quality improvement over the past 20-30 years (US Interviewee #3)

Inductive analysis of the interview transcripts - including transcripts of the two examples above - suggests that, majority of interviewees in the UK and USA agree that there is the need to prioritise who ought be treated as 'customers' in higher education. The definition should not simply be in terms of 'consumers' of services or 'ability to pay for the services, but also in terms of two systems of interests: specific and general systems of interests. The analysis of views obtained suggest that, in the 'specific system of interest', the following ought to be regarded as customers in declining order of priority:

- *Students whose tuition fees have already being made;*
- *Students whose tuition fees will certainly be paid;*
- *Students with a high probability that tuition fees will be paid;*

In the 'general system of interest' the following may be considered as customers in declining order of priority:

- *Providers of Long-term Funds, for infrastructure and staff development;*
- *Providers of Short-term Funds, including Funding for Short-term Projects;*
- *Potential Employers of Graduates.*

Theme#4 - Performance Measures and Excellence

The specific questions under this theme attempt to gather specific data on performance measures and indicators used by interviewees. The specific question analysed is:

Specific Question: #4 – Nature of Performance Measures and Indicators
Can you give examples of performance measures and indicators used?

Inductive analysis of the interview transcripts suggests that, majority of interviewees in the UK and USA use identical performance measures and indicators for academic quality planning and assessment in their respective institutions. Table 3.24A and Table 3.24B, shows the list provided by two interviewees from the UK and the US.

Table 3.24A
Commonly Used Academic Performance Measures and Indicators in the UK
Source: UK Interviewee #5.

	Performance Measures	Performance Indicators
1	Leadership	Communication
2	Management	Problem-solving
3	Continuous Improvement	Improvement Objectives
4	Academic Staff	Retention Rates
5	Resources	Cost Per Staff
6	Teaching Processes	Cost Per Student
7	Research Processes	Cost Per Staff
8	Administrative Staff	Cost Per Staff
9	Support-service Staff	Cost Per Staff
10	Policy and Strategy	Staff Awareness

Table 3.24B
Commonly Used Academic Performance Measures and Indicators in the USA
Source: US Interviewee #5

	Performance Measures	Performance Indicators
1	Leadership	Public Image of Institution
2	Process ownership	Level of Student Complaints
3	Policy and Strategy	Information
4	Academic Staff	Cost per Staff
5	Administrative Staff	Cost per Staff
6	Support-service Staff	Cost per Staff
7	Continuous Improvement	Cost per Student
8	Teaching Processes	Teaching Income
9	Research Processes	Research Incomes
10	Learning Processes	Grades

Theme#5 – Development of Academic Excellence Models

The specific questions under this theme attempts to gather empirical data on the 'possibility' and 'feasibility' of developing an alternative academic excellence model

based on critical success factors derived from academic practices. The specific question to be analysed is:

Specific Question: #5 – Modelling Academic Excellence
What is your take on the use of commercially derived Excellence Models?

The response to the above question from two interviewees from the UK and US are stated below.

"Many of the so called Excellence Models are based on commercial experience not educational experience; they are also biased in favour of TQM principles which most of us do not believe in. We urgently need a model that takes contextual issues relating to academic, administrative and support-service activities more seriously" (UK Interviewee #2)

"Even though the recently introduced Educational version of the Malcolm Baldridge National Quality Award is been used by some educational institutions in the US. It still represents a model being imposed on institutions. A model developed by outsiders for institutions. We need a model developed by institutions for institutions. (US Interviewee #9)

Inductive analysis of the interview transcripts - including the transcripts of the two interviewees above - suggests that, majority of interviewees in the UK and USA believe it is time to have a more 'holistic' and 'integrated' model of academic excellence. This model they argue should fit well into academic terminology, instead of using commercially derived models.

C. Using Inductive Techniques to Create a Pool of Academic Practices

The inductive analysis of the transcripts led to the identification of 'weak', 'good', and 'best' practices. These three categories of practice are defined respectively as practices that are considered 'less important and less effective', 'moderately important and moderately effective', and 'highly important and highly effective' - in bringing about significant improvement in the quality of teaching and research. Appendix C4 shows how inductive analytical techniques have been used to analyse the 39 interview transcripts, resulting in the creation of an 'initial' pool of weak, good, and best quality management practices.

Summary of Data Analysis

Section [3.2] subjected the quantitative data from Questionnaire Part Two to simple hypothesis testing of the functional relationship between the degree of 'importance' and the degree of 'effectiveness' of the quality management practices under study. The responses to the closed questions in Questionnaire Part One, Three, Four, and Five, were also analysed using modal frequencies and the results represented in the form of

SPSS and Microsoft Excel pie charts, simple and multiple bar charts. The qualitative data from the responses to open-ended questions in the questionnaires and interview transcripts were analysed inductively using a simple system of codes to identify themes and the probable association between themes. The quantitative and qualitative analysis of the questionnaires led to the creation of a pool of critical success factors in Appendix C3; and the qualitative analysis of the interview transcripts created the pool of weak, good, and best quality management practices in Appendix C4. This set the stage for examination of the linkages between critical success factors and quality management practices later on in Chapter Four.

3.2.3. Summary of Chapter Three and Link with Chapter Four

This chapter presented both quantitative and qualitative empirical data derived from the responses to the questionnaires and textual material from the interview transcripts. The presentation was done thematically i.e. for all the five research themes using a combination of tables and narratives. Most of the quantitative data were in the form of likert scale responses relating to respondents' perceptions of the degrees of 'importance' and 'effectiveness' of the quality management practices being evaluated. These scaled responses were expressed as numerical data or scores, which came mainly from Questionnaire Part Two. In addition, the 'yes', 'no', and 'do not know' responses were also categorised as quantitative data. The qualitative data came mainly from the textual material i.e. narratives or descriptive accounts representing either respondents' reasons for selecting a fixed answer to a closed question, or a descriptive answer to an open-ended question in both the questionnaires and interview transcripts.

Some of the tables containing primary data were presented directly in the thesis write-up as samples to demonstrate this researcher's data presentation skills. Most of the 'data' tables were however kept under appropriately labelled appendices at the end of the thesis. The main reason for doing so was because of the large volume of data contained in these tables. For much the same reason, the 'secondary data' contained in the documentary evidence of practice were not presented directly in the thesis write-up or in the appendices but kept in manual files for later retrieval and subsequent analysis. Table 3.25 below provides a summary of the test statistics from the evaluation of the quality management practices in Questionnaire Part Two. The 28 practices have been conveniently categorised under 'nine' practice groups - based on

the EFQM 'enabler' and 'results' criteria. Using a two-tail t distribution, alpha value of $\alpha = 0.05$, with a critical value of $t = 2.0211$. The table also shows the r-value, r^2-value and the magnitude of the deviation of the calculated t from the critical t in percentages. From Table 3.25 we can see that, a 'negative' percentage deviation suggests that, the null hypothesis (Ho: $\rho = 0$) that there is no linear relationship between the degree of 'importance' and the degree of 'effectiveness' of the quality management practice in question should be accepted. A 'positive' deviation means the null hypothesis should be rejected and the alternative hypothesis (H_1: $\rho \neq 0$) that there is a positive or negative linear relationship should be accepted.

Table 3.25
Summary of Test Statistics for Questionnaire Part Two
Source: Osseo-Asare Jr., 2003

t-critical = 2.0211; two-tail t distribution where $\alpha = 0.05$
* absolute values

Number	Practice Category	r-value	r^2-value	t-calculated	Percentage Deviation [t-calculated - t-critical] ÷ t-critical × 100
1	Leadership	0.295	0.087	1.9526	- 3.4 accept Ho: $\rho = 0$
2	Policy and Strategy	- 0.853	0.728	10.3448*	412 reject Ho: $\rho = 0$
3	Staff management	- 0.885	0.783	12.0162*	495 reject Ho: $\rho = 0$
4	Resources and partnerships	0.691	0.477	6.0412	199 reject Ho: $\rho = 0$
5	Process management	0.927	0.859	15.6134	673 reject Ho: $\rho = 0$
6	Student results	- 0.562	0.316	4.2979*	113 reject Ho: $\rho = 0$
7	Staff results	0.054	0.003	0.3420	- 83 accept Ho: $\rho = 0$
8	Society result	0.851	0.724	10.2439	407 reject Ho: $\rho = 0$
9	Institutional result	- 0.021	0.0004	0.1328*	- 93 accept Ho: $\rho = 0$

The inductive analysis of the qualitative data from the responses to open-ended questions and reasons for choosing fixed alternative responses in the questionnaires led to the identification of themes. The association between the themes led to the identification of 64 CSFs listed under Appendix C3. This means the first of the three secondary research objectives has been achieved. Similarly, the inductive analysis of the qualitative data from the responses to open-ended interview questions led to the identification of themes relating to quality management practices - these were then categorised as 'weak', 'good', and 'best' in terms of the degrees of 'importance' and 'effectiveness' listed under Appendix C4. Chapter Four examines the association between the CSFs in Appendix C3 and the pool of *weak*, *good*, and *best* practices in Appendix C4. This would form the basis for creating an inductively derived theory, which should lead to the development of an alternative model for academic quality management.

chapter|four

DISCUSSION OF EMPIRICAL RESULTS

Chapter Four discusses the results from quantitative and qualitative analysis of the empirical data presented in Chapter Three, with reference to the concepts and principles of *strategic management*, *strategic marketing management*, and *strategic quality management*. The discussions focus on the Pool of Critical Success Factors (CSFs) derived from the Questionnaires, and the Pool of 'weak', 'good', and 'best' practices emanating from the Semi-structured Interview Transcripts. Chapter Four comprises of two sections: Section [4.1] on the creation of conceptual frameworks for effective management of 'autonomy' criteria; and Section [4.2] on the creation of conceptual frameworks for effective management of 'accountability' criteria. The overall aim is to provide a forensic examination of the probable associations between CSFs and Best Practices in academic quality management, as basis for creating an inductive theory for developing an academic quality model in Chapter Five.

"The best practice phenomenon is widely regarded as a corporate miracle and has become popular among practitioners of various disciplines"
(Jarrar and Zairi, 2000a:240)

4.1

Creating Conceptual Frameworks for Effective Management of 'Autonomy' Criteria

"Effective Leadership and Management are essential if Higher Education are to achieve the wide-ranging Objectives set for them by their many Stakeholders, notably the Governments which provide most of the Funding for Public Higher Education Institutions" (Bush, 2003:17)

Chapter Four discusses the probable associations between the critical success factors (CSFs) and the quality management practices listed under Appendix C3 and C4 respectively, with reference to the concepts and principles *of strategic management* and to *strategic quality management* – also known as *total quality management (TQM)* - as espoused by several quality gurus including Garvin (1988), Kanji and Tambi (2002), and Oakland (2003). The 64 CSFs in Appendix C3 are related to the 28 EFQM Best Practices in Questionnaire Part Two. These 28 practices were pre-selected for evaluation to serve as reference standards for being regarded by expert opinion as 'highly important' and 'highly effective' in delivering significant improvements in quality and performance (British Quality Foundation, 2002; EFQM, 2003a). The aim is to find out the extent to which respondents as managers and leaders of quality in their institutions agree that these 'standard' practices are indeed highly 'important' and highly 'effective' in bringing about significant improvement in the quality of teaching and research.

There are two primary reasons for having a separate chapter for 'discussion' of results and 'interpretations of findings'. First, to acknowledge the works that have already being done by other researchers in Chapter Four; and second, to follow the acknowledgement with the researcher's own *constructivist* interpretations of findings in Chapter Five. This is in recognition of the fact that alternative reasons can be given for the apparent 'perception gaps' between what Quality Managers actually do in *practice* on day-to-day basis and what they ought to be doing in *theory* as suggested

by the theories underpinning TQM and TQM-driven Excellence Models. This researcher's own reasons for these 'perception gaps' will be given in the next chapter to underpin the creation of an inductive theory and the development of a model for sustaining academic quality improvement in UK higher education institutions.

4.1.1. A Pyramid of Weak, Good, and Best Academic Practices?

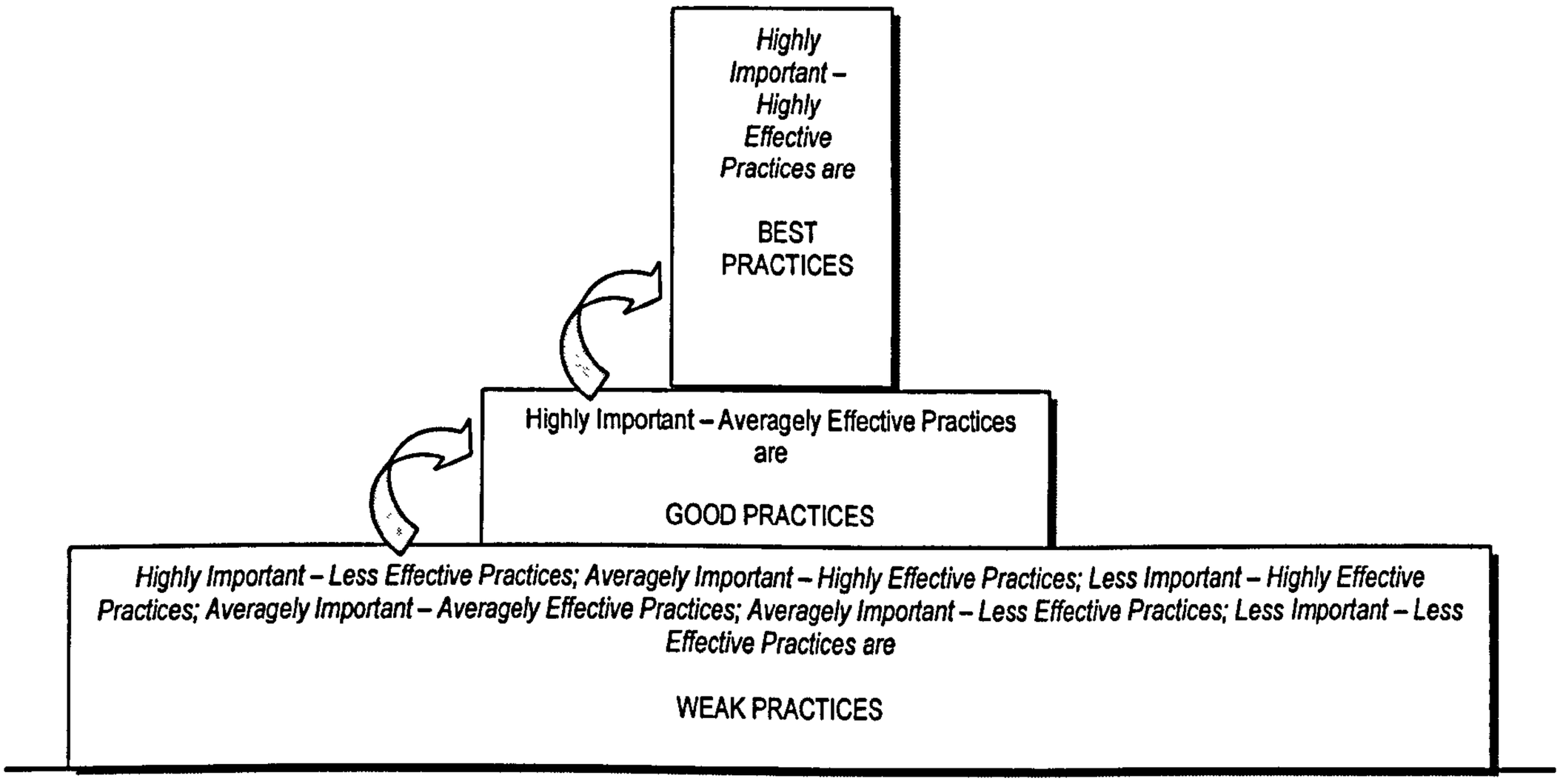
The empirical results suggest that, majority of UK and US interviewees recommend adoption of a systematic 'ad-hoc' and 'continuous' approach to identifying, evaluating, selecting, implementing and controlling best practices in higher education. This urgent need for a systematic approach to Best Practice Management, is confirmed by the findings of a global survey, undertaken by the European Centre for TQM in the UK, which aimed at identifying the critical success factors for effective internal transfer of best practices (Jarrar and Zairi, 2000a: 239-246). In an article based on the global survey findings Jarrar and Zairi (2000a:239) made reference to the work of the American Productivity and Quality Centre (1997) and suggested that 'best' practice is contextual and ought to be selected by a systematic process. They sort to demonstrate that a practice is 'best' because it has led to the production of superior results. 'Superior results', in the words of most UK and US interviewees in this research study, is synonymous to 'world-class' or 'best-in-class' institutional performance results.

The works of O'Dell and Grayson (1997), American Productivity and Quality Centre (1998) Ashton (1998), Jarrar and Zairi (2000a; 2000b), suggest there is a distinction between 'Good' and 'Best Practices' - Good Practices are practices that have been implemented and yet to be proven to deliver superior results; Best Practices are Good Practices that have been proven to deliver superior results (Jarrar and Zairi, 2000a:239). The concept of a 'Weak Practice' was only intuitively described as a 'good idea', which has not yet been proven to have a positive impact on quality and performance. This research study takes this multi-layer description of practices further by actually defining 'best', 'good' and 'weak' practices in terms of relative 'importance' and relative 'effectiveness' in delivering superior quality and performance results (see Figure 4.1 below). The empirical justification for doing so, can be found in earlier works by Blazey (1997) and later Zairi (2000a:335) who adopted Blazey's (1997) approach to evaluate best practices in terms of the 'degree of

importance' and 'degree of effectiveness', and concluded that a best practice must be judged to be 'highly important' and 'highly effective'.

Figure 4.1 below, provides a framework for distinguishing between 'weak', 'good' and 'best' academic practices. The framework provides very narrow definitions of 'best' and 'good' academic practice as practices that must be 'highly important - highly effective' and 'highly important - moderately effective', respectively. The definition for a 'weak' academic practice is rather broad. The strategic implications of these definitions for systematic identification selection and implementation of best practices for sustaining quality improvement will be examined in the next chapter. The answers to the question - what do we do with 'weak' and 'good' academic practices - will be address then. For the moment, it is enough to say that, the arrows in Figure 4.1, indicate that, it is *possible* and *feasible* to improve on 'weak' and 'good' practices by raising their levels of 'importance' and 'effective' in delivering superior results, to the levels of 'best' practices.

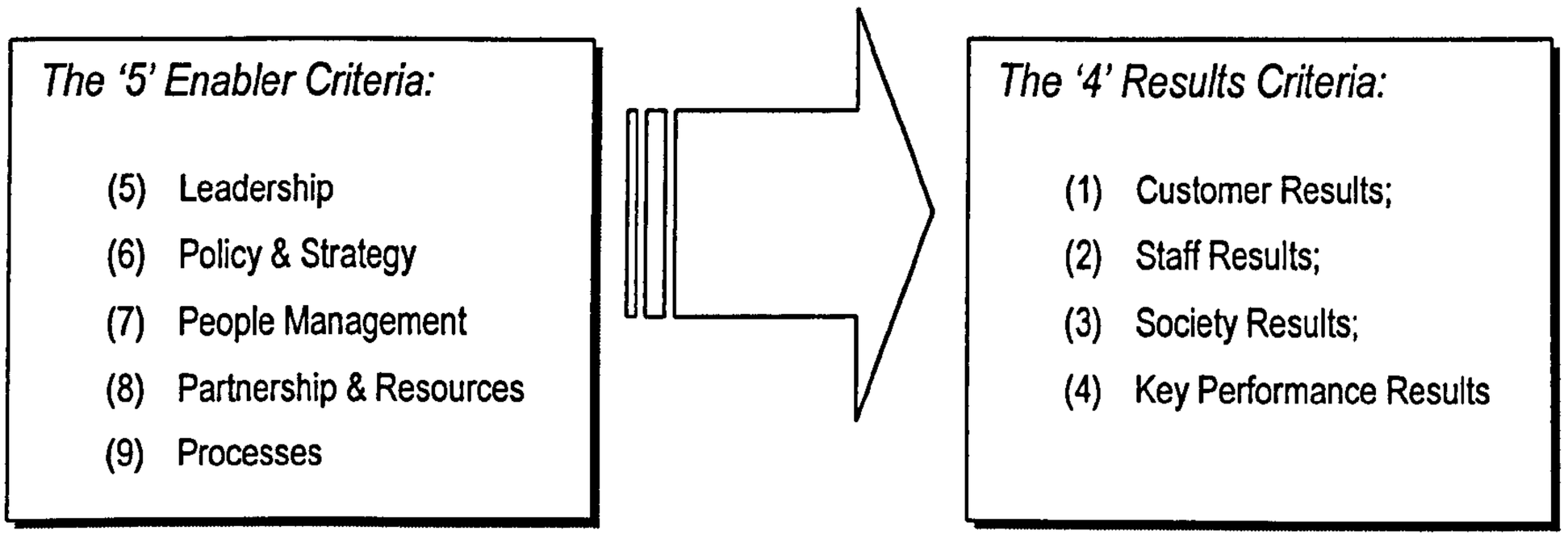
Figure 4.1
Osseo-Asare's Pyramid of Academic Practices
Source: Osseo-Asare Jr. 2003



The following sub-sections will discuss the results from the Best Practice Evaluation in Questionnaire Part Two, under the five 'enabler' and four 'results' main criteria suggested by the EFQM Excellence Model shown in Figure 4.2 below. It is worth noting that the terms 'autonomy' and 'accountability' were frequently used by

interviewees to represent 'means' and 'ends' i.e. 'enablers' and 'results' in the EFQM terminology. It is hoped that by using the EFQM criteria as a reference standard, the inherent *weaknesses* and *strengths* of the model can be highlighted.

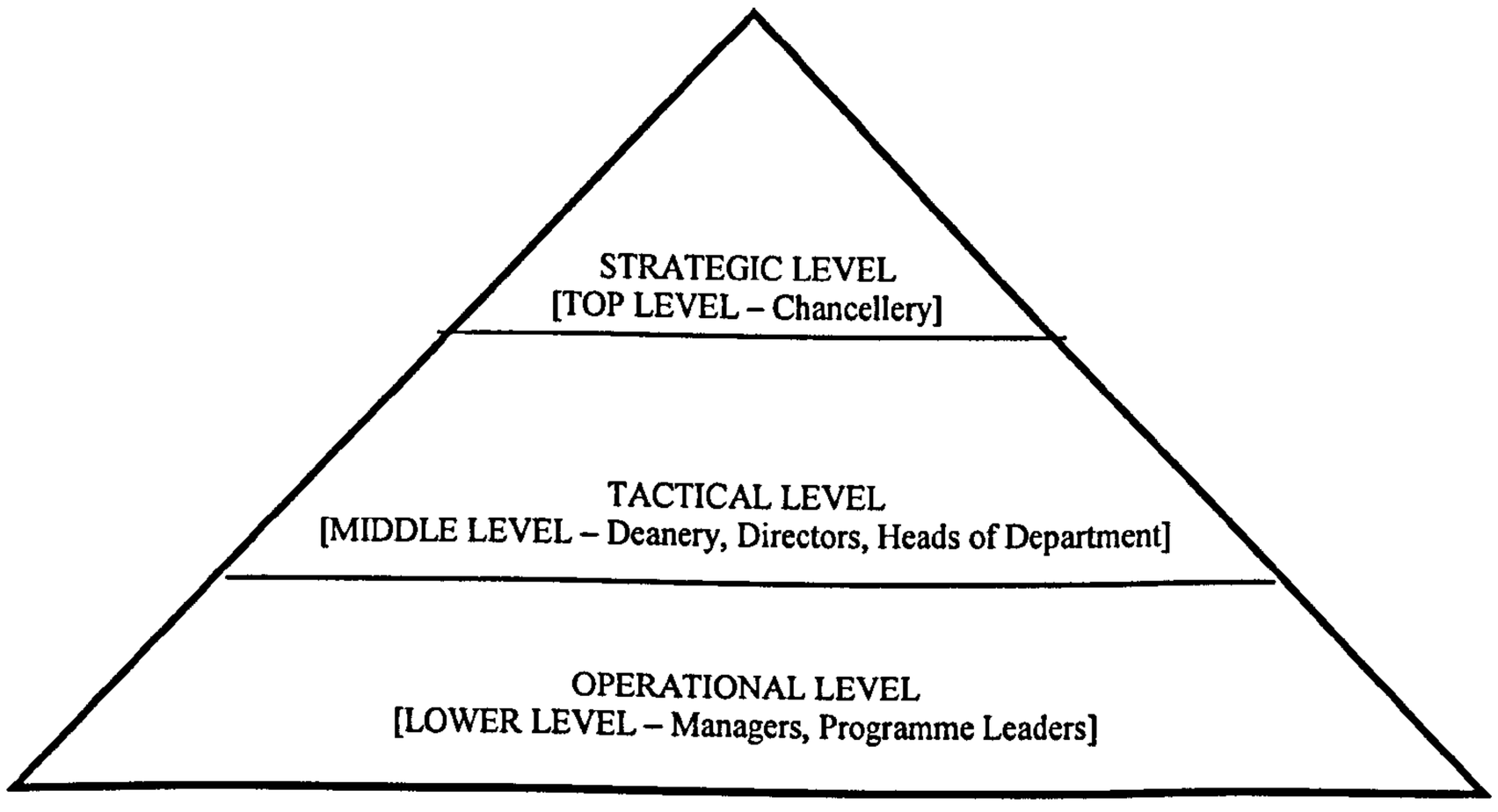
Figure 4.2
The Main EFQM Enabler and Results Criteria for Excellence
Source: EFQM (2003a), British Foundation for Quality (2002)



4.1.2. Best Practices for Sustaining an Enabling Environment

The extensive literature on M*anagement, Strategic and Operational Management, Quality Management, Strategic Quality Management*, and *Total Quality Management* suggest that, any manager responsible for quality in higher education may find himself or herself at one of three formal leadership positions shown in Figure 4.3 below. These positions are 'strategic', 'tactical' or 'operational' levels of management and leadership. Some writers including Thompson (2003) do not emphasis the 'tactical level' and see it merely as the interface between 'strategic' and 'operational' levels.

Figure 4.3
The Three Levels of Management and Leadership Position in a Formal Organisational Structure
Source: Based on Mullins (2002)



A. Best Practices for Effective Managerial Leadership

The literature on TQM over-emphasise leadership at the top or strategic level at the expense of operational quality management - this perhaps supports the empirical evidence that TQM is difficult to implement at the operational level (Dale, 1999; Kanji and Tambi, 2002:85). The works of Parker (1994:5), Mullins (1999:233), and Thompson (2003) suggest that, a 'quality manager' at any of these three formal leadership positions must do two things. First, as 'managers' they ought to be 'efficient' at 'doing things right first time'; and second, as 'leaders' they ought to be 'effective' in 'doing the right things'. It suggests that quality managers at all levels must learn to be both *effective* [do right things] and *efficient* [do things right] by 'doing the right things right first time' – this confirms the cyclical relationship between *effectiveness* and *efficiency*. This cyclical relationship is the fundamental philosophical underpinnings of the empirical evaluation methodology used in this doctoral research study. The extent to which respondents' think they are 'doing things right' is assessed in terms of the relative 'importance' of a leadership practice; and the extent to which they think they are 'doing the right things' is assessed in terms of relative effectiveness of the leadership practice under study. This clearly suggests that the evaluation criteria used in this study are a direct measure of *efficiency* and *effectiveness* of a quality management practice.

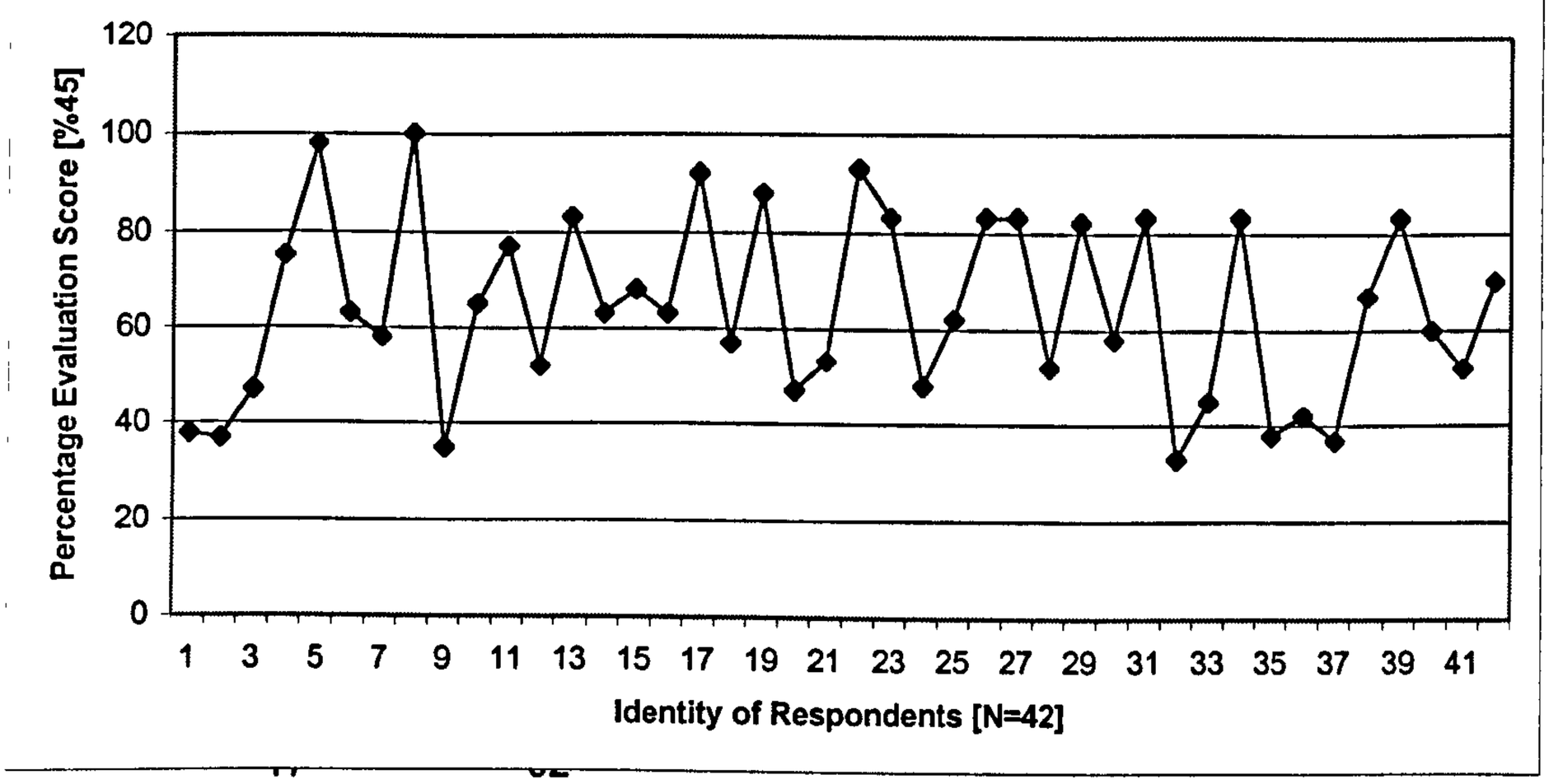
According to Thompson (2003:409) leaders 'come in all shapes and sizes', which suggests that we should NOT expect all the 42 respondents in this research study to evaluate the 28 quality management practices, including the 4 leadership practices as 'highly important' and 'highly effective' and therefore as 'best practices'. If the assertion that leaders 'come in all shapes and sizes' is 'true' then it explains in part the different leadership evaluation scores obtained by individual respondents. It also explains the erratic behaviour of the curve in Graph 4.1 below, which represents the total score for the four leadership practices for each of the 42 respondents. The overall result for leadership practices, reveals that, majority of respondents thought *three* out of the *four* Excellence Model Leadership Best Practices were 'weak' leadership practices, with the exception of one, which was thought to be a 'best' leadership practice. To facilitate understanding, the analysis of the evaluation results for these four practices, are briefly summarised below from a pessimist's point of view:

- Leadership Practice QN = 1: - Described by most respondents (71%) as a BEST PRACTICE;

- Leadership Practice QN = 2: - Described by most respondents (74%) as a WEAK PRACTICE;
- Leadership Practice QN = 3: - Described by many respondents (62%) as a WEAK PRACTICE;
- Leadership Practice QN = 4: - Described by majority of respondents (83%) as a WEAK PRACTICE.

The fact that the four leadership practices on the whole represent 'weak' practices is confirmed statistically by test statistics, which show the t-calculated value of 1.9526 is less than the t-critical of 2.0211. It suggests that, there is no linear relationship between the degree of 'importance' and the degree of 'effectiveness' of leadership practices. The expectation is that the alternative hypothesis that, there is a strong positive linear relationship between 'importance' and 'effectiveness' i.e. H1: $\rho \neq 0$ should be accepted, as a condition for a quality management practice to be categorised as a best practice.

Graph 4.1
Evaluation of Leadership Practices in UK Higher Education Institutions
(Source: Based on Questionnaire Part Two - Questions: 1, 2, 3, 4)

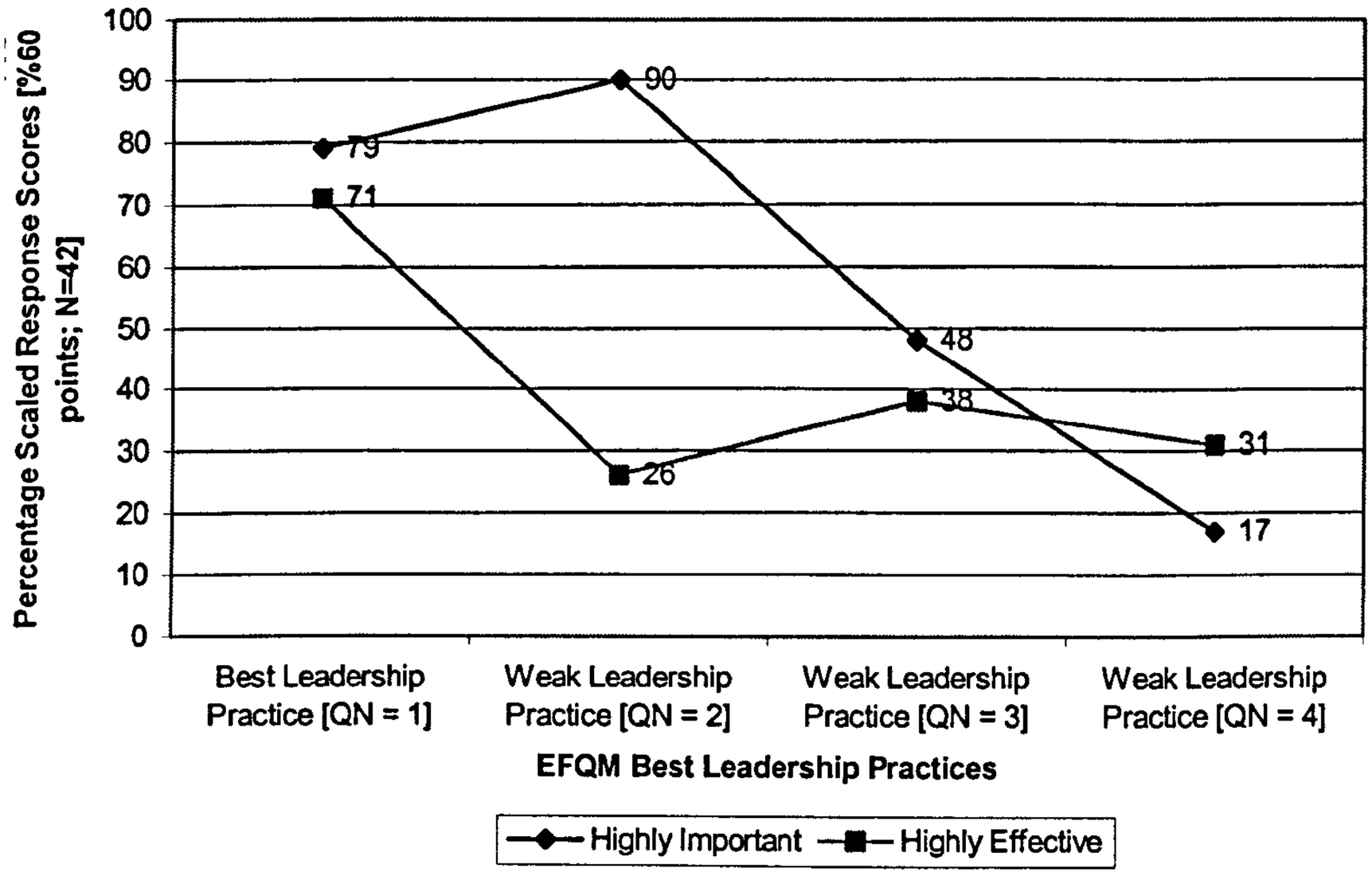


The actual results for all four practices represent 'perception gaps' for which alternative strategies need to be generated, evaluated and successfully implemented in order to close the gaps. Chart 4.1 below, shows that a 'perception gap' in this research study, may be created in three ways by:

- *Differences in the Actual Score for the relative 'importance' of a Practice; OR*
- *Differences in the Actual Score for the relative 'effectiveness' of a Practice; OR*
- *Difference in the Actual Scores for BOTH the relative 'importance' and 'effectiveness' of a Practice.*

These 'perception gaps' therefore represent gaps in 'importance' i.e. 'efficiency'; OR gaps in 'effectiveness'; OR gaps in BOTH. It provides an empirical justification for suggesting that a 'perception gap' is indeed a 'quality gap'. It is important to recognise that these are 'gaps' based on 'perceptions' of individual respondents and therefore reflect what some writers describe as 'probabilistic causality' rather than 'deterministic causality'. The former represents a 'qualitative' inductive assessment; and the later, a 'quantitative' deductive measurement of the level of quality and performance. Positivists like Kanji and Tambi (2002:109-147) used a quantitative deductive approach to assess quality in higher education leading to measurement of Performance Excellence Indices.

Chart 4.1
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Leadership Practice
(Source: Based on Questionnaire Part Two - Questions: 1, 2, 3, 4)



This doctoral research thesis uses a qualitative inductive approach to assess academic quality, as a viable alternative measurement tool to Professor Gopal Kanji's Business Excellence Model (Kanji and Tambi, 2002) model, and the EFQM Excellence Model. The merits and demerits of the two approaches will be examined in more depth in the next chapter. However, one major difference between the two is in the Scoring Mechanisms; Kanji's Model only specifies 'poor' and 'excellent' scores (see Kanji and Tambi, 2002:112). The EFQM Excellence Model provides a much wider category

of scores based on the combination of two factors: *approach* and *deployment* OR *results* and *scope*; and five levels of scores: 0%, 25%, 50%, 75%, or 100%. Whereas Kanji's Scoring Mechanism is too simplistic, the EFQM Mechanism is too broad and the boundaries between scores are not well defined – both scoring mechanisms show extensive overlaps (see Table 4.1 below). Table 4.1 also presents the Osseo-Asare's scoring mechanism which is based on the combination of two factors: *IMPORTANCE* and *EFFECTIVENESS*; and four predetermined levels of scores: *WEAK [0-45%]*, *GOOD [46-69%]*, *BEST [70-79%]*, and *EXCELLENT [80-100%]*. Application of the scoring mechanism to the empirical data, suggest the levels are appropriate and informative. Confidence in the four levels was increased when the empirical results were mapped against them. However, fuller validation of the scoring mechanism will be undertaken as post-doctoral work. It is comparatively more difficult to categorise these practices using Kanji's and EFQM Models; because the former uses only two score levels: [0-75% = POOR] and [76-100% = EXCELLENT]. This overlaps under 'Best Practice' and the later uses five score levels which overlap at each level under each practice category (see Table 4.1 below).

Table 4.1
Comparison of Scoring Mechanisms
Source: Kanji and Tambi (2002:112), EFQM (2003a), British Quality Foundation (2002)

* Weak Practice; ** Good Practice; *** Best Practice; **** Excellent Practice

Category of Practices	Osseo-Asare Model	Kanji Business Excellence Model	EFQM Excellence Model
	%	%	%
WEAK PRACTICE *	0 – 45	Poor	0%; 25%; 50%
GOOD PRACTICE **	46 – 69	Poor	50%; 75%
BEST PRACTICE ***	70 – 79	Poor; Excellent	75%
EXCELLENT PRACTICE ****	80 - 100	Excellent	75%; 100%

The overlaps under the EFQM Model is more extensive than those under Kanji's Model, which can be explained in part by the fact that the EFQM scoring mechanism is more subjective; whereas Kanji's - with its strong statistical foundation - is more objective. The intention is to position the scoring mechanism developed in this study between the two. So far we know that the 'perception gap' comprises of the 'gap in importance' plus the 'gap in effectiveness' of a leadership practice. The scoring mechanism developed for this study i.e. the Osseo-Asare's model in Table 4.1 above, is applied to the 'importance gap' and 'effectiveness gap' – for each leadership

practice below. It gives us an idea of the extent to which management time, effort, and resources are needed to close the gaps (see Table 4.2A and 4.2B, below).

Leadership Practice #1 – [QN = 1]

Leadership Practice #1 – [QN = 1] – as briefly described below - relates to the extent to which respondents as Quality Managers, are personally and actively involved in developing the *MISSION, VISION, VALUES*, and *PRINCIPLES* of their respective institutions in the areas of Teaching, Learning, Scholarship and Research.

Mission, Vision, Values, and Principles:
[Leadership Practice #1, Questionnaire Part Two, Question #1, QN = 1]

Chancellery, Deanery, and Heads of departments are personally and actively involved in making the Mission and Vision Statements of the Institution explicit, and in expanding these statements into a set of Values and Principles relating to Teaching, Learning, Scholarship and Research [Code: QN18].

Table 4.2
Importance and Effectiveness Gaps for the Four Leadership Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.2A – IMPORTANCE GAP

Leadership Practices	Relative Importance Score	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 1]	79 ***	+9	-1
#2 – [QN = 2]	90 ****	+20	+10
#3 – [QN = 3]	48 **	-22	-32
#4 – [QN = 4]	17 *	-53	-63

Table 4.2B – EFFECTIVENESS GAP

Leadership Practices	Relative Effectiveness Score	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 1]	71 ***	+1	-9
#2 – [QN = 2]	26 *	-44	-54
#3 – [QN = 3]	38 *	-32	-52
#4 – [QN = 4]	31 *	-39	-49

Table 4.2A above, shows that, the Relative Importance Score (RIS) of 79% for Leadership Practice #1 – [QN = 1], falls within the 'Best Practice Score Range' (70-79). It is 9 points above the Lower-Limit of 70 points but 1 point below the Lower-Limit of the 'Excellence Score Range' of 80 points or percent. A Best Practice Gap (BPG) in this study is determined by the difference between the Actual Evaluation Score and the Lower-Limit of the Best Practice Score Range. For instance, the BPG (Importance) for Leadership Practice #1 = 79% - 70% = + 9% or + 9 points. Similarly, an Excellent Practice Gap (EXG) is the difference between Actual

Evaluation Score and the Lower-Limit of the Excellence Score Range, for example, EXG (Importance) for Leadership Practice #1 = 79% - 80% = -1% or –1 point. The same logical inductive argument is applied to Table 4.2B above. It shows that, the Relative Effectiveness Score (RES) of 71% for Leadership Practice #1 – [QN = 1], has a Best Practice Gap (BPG) of 'PLUS' 1% i.e. BPG (effectiveness) = 71% - 70% = +1%, just 1 extra point above the Lower-Limit of the Best Practice Score Range. Similarly, the Excellent Practice Gap (EXG) of 'MINUS' 9% i.e. EXG (effectiveness) = 71% - 80% = - 9%, that is 9 point below the Lower-Limit of the Excellence Score Range. These findings have serious implications for continuous 'efficiency' and 'effectiveness' of Quality Managers in Leadership position; and for strategic quality management decision-making as a whole – these implications will be examined in detail in the next chapter on interpretation of findings.

The fact that most respondents thought that the Leadership Practice #1 – [QN = 1] is a Best Practice, appears to suggest that, they were strategically aware of the relative importance and effectiveness of clarifying the relationship between *Mission, Vision, Values and Principle.* They were also aware of the need to take specific action in order to derive the maximum benefit from the relationship. A critical examination of the documentary evidence supplied by participating institutions identified key activities carried out as part of Leadership Practice #1, in the areas of: Mission, Vision, Values and Principles relating to Academic Quality Management. From Figure 4.4 on page 223 we can see that:

***Mission Statements:** - respondents #1 to #42*

- *Mission Statements are explicitly expressed in terms of Academic Excellence, and/or Academic Quality;*
- *Mission Statements explicitly express Academic Excellence and/or Quality in terms of Teaching and Research Excellence.*

***Vision Statements:** respondents #1 to #42*

- *Vision Statements underpins the collective perceptions held by the Chancellery, Deanery and Heads of Departments about the Mission of the Institution;*
- *Vision Statements express Collective Perceptions in terms of national and international Performance Excellence.*

***Values:** respondents #1 to #42*

- *Promoting Diversity and Equal Opportunity;*
- *Promoting Life-long learning, research, and scholarship.*

Principles - respondents #1 to #42

- *Continuous Improvement through Value for Money;*
- *Preserving Academic Freedom and Institutional Autonomy.*

Most pre-1992 institutions like the University of Cambridge and Oxford have Research-centred Missions, whereas post-1992 institutions like the University of Derby, and Sheffield Hallam, have Teaching-centred Missions (Cambridge, 2003a; Oxford, 2003b; Derby, 2003a; Sheffield Hallam, 2003b). This is confirmed by the views of experts from the UK and the USA.

"Deciding the right balance between Teaching and Research is difficult to achieve. There is the difficulty of funding allocations and of recruitment of academic staff willing to teach and research at the same time. This problem can only be resolved through effective leadership, to help decide the extent to which one mission area should be concentrated on at the expense of the other, and how to meet funding gaps resulting from missed opportunities in that area"(UK Interviewee #4).

"Some academics and practitioners have strongly suggested that institutions should concentrate on what they do best rather than waste time and money trying to achieve both missions i.e. Teaching and Research simultaneously. Others have suggested that because Research enriches Teaching at least attempts ought to be made to achieve a balance between Teaching and Research in an integrated manner. I am in favour of the later"(US Interviewee #10).

Inductive analysis of the views of UK and US interviewees - including the two above - suggests that, the Mission Statements of UK and US higher education institutions, still represent the overall purpose or 'reason d'etre' of the institution. Even though best practices exist in this leadership area of 'Missions', there is evidence that the right balance between Teaching and Research has been difficult to achieve when it comes to the issue of public funding allocations, and staff recruitment.

Leadership Practice #2 – [QN = 2]

Leadership Practice #2 – [QN = 2] – as briefly described below - relates to the extent to which respondents as Quality Managers, are personally and actively involved in developing the internal and external COMMUNICATION INFRASTRUCTURE for effectively communicating quality improvement *policy, strategy, objectives*, and *targets* of their respective institutions.

COMMUNICATION INFRASTRUCTURE:
[Leadership Practice #2, Questionnaire Part Two, Question #2, QN = 2]

Chancellery, Deanery, and Heads of Departments not very enthusiastic about personally and actively communicating quality improvement Policy, Strategy, Objectives and Targets emanating from Mission, Vision, Values, and Principles [Code: QN19].

Table 4.2A above shows that, for the Leadership Practice #2 – [QN = 2] with a Relative Importance Score (RIS) of 90%, there is a corresponding Best Practice Gap (BPG) of +20; and a corresponding Excellence Practice Gap (EXG) of +10 point. Table 4.2B, shows that, the Relative Effectiveness Score (RES) of 26%, results in a corresponding Best Practice Gap (BPG) of 'MINUS' 44% i.e. BPG (effectiveness) = 26% - 70% = - 44%; and a corresponding Excellent Practice Gap (EXG) of 'MINUS' 54% i.e. EXG (effectiveness) = 26% - 80% = - 54%. The implications of these scores for strategic quality management decision-making will be explained in detail in the next chapter.

The results show that most respondents thought that Leadership Practice #2 is a *Weak Practice.* This suggest that, even though respondents seem to have a clear understanding of the relationship between *Mission, Vision, Values and Principle* they have not taken appropriate specific actions to effectively communicate the quality improvement policy, strategy, objectives and targets to all staff down a formal hierarchical structure for quality management. For instance, the analysis of the responses to Questions #2, #4, #6, and #7 under Questionnaire Part One, reveals two things. First, that majority of respondents (79%) do not have a formal written Job Description in support of their Job Position. Second, majority (89%) confirmed they had successfully implemented formal structures for quality management. This is what an expert in the UK has to say:

"Most UK higher education institutions have in place a state of the art integrated communication infrastructure; however, there appears to be a deliberate reluctance to use these infrastructure to communicate with staff, as a consequence, quality improvement strategies are not effectively implemented. The main reason is that the idea that effective communication ought to be the responsibility for all staff is simply rhetorical and not practical. This is because the demands for academic freedom and autonomy encourages transfer of data or information on need to know basis in order to maintain the balance of power and therefore the status quo"(UK Interviewee #7).

Inductive analysis of the interview transcripts - including the transcript of the interviewee above - and a critical examination of the documentary evidence supplied by participating institutions identified key activities relating to Leadership Practice #2 that might not have been successfully implemented. From Figure 4.4 on page 223 we can see that:

Internal Communication Infrastructure: *- respondents #1 to #42*

- *Communication infrastructure not continuously improved to reflect frequent changes in institutional structures brought about by widening funding gaps;*

- *Deployment of Quality Improvement Policy, Strategy, Objectives and Targets not Timely, because of rising Staff Turnover, stemming from dispute over pay and working conditions, rising workloads, lack of good career prospects;*
- *ICT infrastructure for academic and administrative operations lack regular maintenance and improvement, because of teaching and research funding backlogs;*
- *Weak Cross-departmental Networks for sharing and implementing Best Practices.*

External Communication Infrastructure: respondents #1 to #42

- *Weak Cross-Institutional Networks for sharing Best Practices;*
- *Web-sites poorly designed, and not regularly updated;*
- *Weak systems for capturing feedback from students and other external stakeholders;*
- *Lack of a dedicated Marketing Department to lead communication of institution's brand and reputation.*

The analysis of the responses to Question #5 under Questionnaire Part One, revealed that very few respondents (5%) said they were to a 'large extent personally and actively involved' in efforts to improve quality at both the unit i.e. departmental level and institutional level. This apparent lack of enthusiasm - on the part of respondents as leaders - has been noted by most interviewees, as one of the reasons why quality improvement strategies are not effectively communicated; and as evidence of 'management by misinformation' rather than 'management by facts' suggested by Kanji and Tambi (2002). Two experts from the UK had this to say:

"Quality Manager who are effective leaders, are not those who are informally chosen as leaders and imposed on staff. They are those who emerge naturally from the Academic Quality Improvement Team or Group, with many years experience, and through the demands of the situation or wishes of the Team and are then formally appointed or elected. Such leaders have the required dynamic form of behaviour to decide the teaching-research balance, and are able to influence staff positively by creating and sustaining a culture of excellence. This results in the achievement of quality improvement policies, strategies, objectives and targets, which meet the needs and expectations of students, the government and other stakeholders including staff"(UK Interviewee #10).

"Not informing staff on what they ought to be doing to sustaining quality improvement is one way some keep themselves in power. It is evidence of internal politics and power play. The relevant information is usually available, but most managers release them on who wants to know basis. You need to appreciate the dynamics of human behaviour in order to communicate more effectively to influence staff positively"(UK Interviewee #9).

Majority of interviewees in the UK, said that they performed 'leadership role' when exercising authority as an attribute of their stated position in a formal hierarchical structure - as contained in their job descriptions. A UK interviewee had this to say:

"Most staff members do not see me as a 'leader' but as a 'manager' because my formal appointment has not been ratified in their hearts and minds, thus making the performance of my prescribed

leadership role less effective in yielding desired results. At best I'm only able to elicit mechanical behaviour resulting from a superior-subordinate relationship, which I feel is not sustainable because it is unreal" (UK Interviewee #5).

The analysis of the responses to Question #1 and #3 in Questionnaire Part One revealed that, 53% respondents were either academics or administrators operating within a formal structure for quality management, under the formal job title of 'Quality Manager'. About 69% respondents had 'more than 5 years' job experience in academic quality.

Leadership Practice #3 – [QN = 3]

Leadership Practice #3 – as briefly described below - relates to the extent to which respondents as Quality Managers, are personally and actively involved in EMPOWERING and MOTIVATING their subordinate STAFF for effective LEADERSHIP in the implementation of quality improvement *policy, strategy, objectives*, and *targets* of their respective institutions.

STAFF EMPOWERMENT, MOTIVATION AND LEADERSHIP
[Leadership Practice #3, Questionnaire Part Two, Question #, QN = 3]

Deanery, Heads of Department and Programme Leaders personally and actively involved in empowering and motivating subordinate staff in order to achieve stated Teaching and Research Quality Improvement Objectives and Targets [Code: QN20].

Table 4.2A and 4.2B give the relative importance score (RIS) of 48%; a relative effectiveness score (RES) of 38% for Leadership Practice #3. In summary:

- *For RIS of 48%; BPG (Importance) = - 22%; and EXG (Importance) = - 32%*
- *For RES of 38%; BPG (Effectiveness) = - 32%; and EXG (Effectiveness) = - 42%.*

The implications of these scores for strategic quality management decision-making will be explained in detail in the next chapter. Many respondents thought Leadership Practice #3 is a *Weak Practice*. This appears to suggest that, since appropriate actions have not been taken to effectively communicate the quality improvement policy, strategy, objectives and targets to academic and non-academic staff down the formal hierarchical structure for quality management; it has probably led to low levels of staff empowerment and motivation. A critical examination of the documentary evidence supplied by participating institutions identified key activities relating to Leadership Practice #3 that might not have been successfully implemented.

***Staff Empowerment:** - respondents #1 to #42*

- *Lack of commitment from Deanery and Heads of department to provide full opportunities for Teaching and Research Staff to develop their professional skills, because of weak budgetary support;*
- *Teaching and Research Staff not personally and actively involved in setting Teaching and Research Quality improvement targets for their areas of responsibility;*
- *Over-centralised Staff Development Budgetary Systems;*
- *Lack of leadership training schemes.*

***Staff Motivation:** respondents #1 to #42*

- *Staff Development Needs Not properly addressed;*
- *Weak implementation of an Open two-way Communication System;*
- *Weak systems for capturing feedback from staffs;*
- *Weak systems for addressing welfare issues.*

Majority of interviewees attributed this weakness in practice to the leadership style adopted by most Quality Managers in UK HEIs, which requires managers to obtain improvement results by close 'inspection' and 'control' of the actual task carried out by their subordinates; rather than by motivation and empowerment. According to Gretton (1995), there is a move away from leaders who obtain improvement results by close 'inspection' and 'control' of the actual task carried out by sub-ordinate staff, towards leaders who obtain results by creating an enabling environment of coaching, support, motivation and empowerment of subordinates. There is empirical evidence in support of the fact that many UK HEIs – unlike their US counterparts - are slowing moving towards creating and sustaining a culture of excellence through staff empowerment (Kanji and Tambi, 2002). One UK expert said:

"Because of the inspection-base regimes of the QAA formerly under the Subject-Reviews, the leadership style of most Quality Mangers in the UK are still based of 'inspection' and 'control' mentality...not on creating and sustaining an environment for excellence through empowerment, motivation and support of staff. UK HEIs - unlike their US counterparts - have been slow in responding to the move away from a leadership emphasis on obtaining results by close 'inspection' and 'control' towards getting results by sustaining a culture of empowerment"(UK Interviewee #11).

The view expressed above by the UK expert is confirmed by the results of the analysis of responses to Question #11 under Questionnaire Part One, where majority (98%) of respondents held the view that, the UK's QAA Model represents an 'inspection-based' approach to quality management.

Leadership Practice #4 – [QN = 4]

Leadership Practice #4 – as briefly described below - relates to the extent to which respondents as Quality Managers, are personally and actively involved in SUPPORTING, ENCOURAGING, and REWARDING their subordinate STAFF in the successful implementation of quality improvement *policy, strategy, objectives*, and *targets* of their respective institutions. Table 4.2A and 4.2B above, gave the Relative Importance Score (RIS) and Relative Effectiveness Score (RES) of Leadership Practice #4 as 17% and 31% respectively. These scores correspond to: BPG (Importance) of – 53%; EXG (Importance) of – 63%; BPG (Effectiveness) of - 39%; and EXG (Effectiveness) - 49%. The implications of these scores for strategic quality management decision-making will be explained in detail in the next chapter.

STAFF SUPPORT, ENCOURAGEMENT AND REWARD:

[Leadership Practice #4, Questionnaire Part Two, Question #4, QN = 4]

Deanery, Heads of Department and Programme Leaders personally and actively involved in supporting and encouraging subordinate staff to carry out their work in an environment which supports teaching and research excellence, in order to achieve stated Teaching and Research Quality Improvement Objectives and Targets [Code: QN21].

The fact that many respondents thought that the Leadership Practice #4 is another example of a *Weak Practice*, appears to suggest that, since appropriate actions have not been taken to empower and motivate staff; it has led to low levels of staff support and encouragement. In this doctoral research study any suggested linkage(s) between the four key leadership practices ought to be explained from the perspective of 'probabilistic causality' rather than a 'deterministic causality'. The former is based on probable associations between critical success factors and practices, which are constantly changing; and may form the basis for deterministic causality under the right set of conditions. A critical examination of the documentary evidence supplied by participating institutions identified key activities relating to Leadership Practice #4 that might not have been successfully implemented.

***Staff Support:** - respondents #1 to #42*

- *Lack of funding to support Professional Development of Staff;*
- *Weak ICT Support for Teaching and Research Staff;*
- *Weak Support for Staff Welfare Issues – Stress, Finances, Accommodation.*

Staff Encouragement: respondents #1 to #42

- *Weak Strategies for Handling Staff-Student Complaints about Teaching and Learning Styles;*
- *Weak Strategies for Managing Staff Finance and other related welfare issues;*
- *Weak encouragement for Team Effort rather than individualism.*

Staff Rewards: respondents #1 to #42

- *Declining Opportunities for Promotion to Senior Lectureships, Readership and Professorship;*
- *Annual Staff Appraisals not effectively linked to Promotions and Improvement in Staff Finances, but rather increased responsibility and workload.*

These weak practices are confirmed by the response to Question #3 in Questionnaire Part Four, which revealed that majority (83%) of respondents see the link between 'staff performance indicators' and 'staff rewards' as less effective because they are not successfully implemented. Some interviewees argued that, the linkage only existed at the human resources policy level, but lacks formal leadership to maintain its continuous implementation. According to the literature, formal and informal leadership structures determine the nature and effectiveness of the leadership-staff relationship, which according to Bass (1960), is one in which intended behaviour and results bring about functional behaviour and achievement of team objectives. A UK expert made this comment:

> *"The influence of some quality managers on staff stems from their ability to use their legitimate position, personal qualities, and expert knowledge to reward and sometimes exercise a reasonable level of coercion, in order to obtain intended staff behaviour and results. The link between 'support and encouragement of staff' and 'sustainable quality improvement level' in UK HEIs is loosely coupled, because it is not well understood and unfortunately less researched"(UK Interviewee #12).*

The above comment supports the fact that Leadership Practice #4 is 'weak', clearly suggesting that leadership-staff relationship is 'weak' in most of the higher education institutions participating in this research study.

In summary, the overall 'weakness' in leadership practices is confirmed statistically with t-calculated being less than the t-critical value, and r-value is near zero. Figure 4.4 below, brings together the key leadership practices and critical success factors under a single framework to encourage Quality Managers to become strategically aware of the environment they work in. It is a framework, which suggests that quality in higher education is a complex issue requiring dynamic or transformational leadership style to deal effectively with the multiplicity of critical success factors in micro and macro environment in which institutions operate.

MISSION, VISSION, VALUES, PRINCIPLES:
[Leadership Practice #1, Questionnaire Part Two, Question #1, QN = 1]

Mission:
- Academic Quality, Academic Excellence;
- Teaching, Learning, Scholarship and Research Quality and Excellence.

Vision:
- *Vision underpins Mission;*
- Vision of National and International Excellence.

Values:
- Diversity and Equality;
- Learning and Knowledge Society.

Principles
- Continuous Improvement through Value for Money;
- Academic Freedom and Autonomy.

COMMUNICATION INFRASTRUCTURE:
[Leadership Practice #2, Questionnaire Part Two, Question #2, QN = 2]

Internal Infrastructure:
- *Maintenance and Investment;*
- *Deployment of Quality Improvement Policy and Strategy;*
- *ICT infrastructure for academic and administrative operations;*
- *Networks for Internal Transfer of Best Practices.*

External Infrastructure:
- *Cross-Institutional Networks for sharing Best Practices;*
- *Websites design and update;*
- *Systems for capturing feedback from students and other external stakeholders;*
- *Dedicated Marketing Department leading communication of brand and reputation.*

Figure 4.4
OSSEO-ASARE'S FRAMEWORK FOR EFFECTIVE MANAGERIAL LEADERSHIP FOR ACADEMIC QUALITY

STAFF SUPPORT, ENCOURAGEMENT AND REWARD:
[Leadership Practice #4, Questionnaire Part Two, Question #4, QN = 4]

Staff Support:
- *Funding to support Professional Development of Staff;*
- *ICT Support for Teaching and Research Staff;*
- *Support for Staff Welfare Issues.*

Staff Encouragement:
- *Strategies for Handling Staff-Student Complaints about Teaching and Learning Styles;*
- *Managing Staff Finance and other related welfare issues;*
- *Encouragement for Team Effort rather than Individualism.*

Staff Rewards:
- *Promotion to Senior Lectureships and Professorship;*
- Annual Staff Appraisals effectively linked to Promotions and Improvement in Staff Finances.

STAFF EMPOWERMENT, MOTIVATION AND LEADERSHIP
[Leadership Practice #3, Questionnaire Part Two, Question #, QN = 3]

Staff Empowerment:
- *Strong Budgetary Support;*
- *Teaching and Research Staff involvement in setting Quality improvement targets;*
- *De-centralised Staff Development Budgetary Systems;*
- *Leadership Training*

Staff Motivation:
- *Addressing Staff Training and Development Needs*
- *Implementation of an Open two-way Communication System;*
- *Systems for capturing feedback from staffs;*
- *Systems for addressing welfare issues.*

B. Best Practices for Effective Quality Improvement Policy and Strategy

The literature suggest that 'quality improvement policies' represent the set of rules and regulations or guidelines required to regulate the behaviour of staff and processes in an effort to successfully implement strategies for achieving stated quality improvement objectives and targets (Thompson, 2003:1127; Oakland, 2003). The expectation is that 'policy' will stem from 'values and principles', which in turn will form the bases for formulating 'strategy' – which represents the 'means' for achieving stated objectives and targets (Richardson and Thompson, 1994). This association between 'values', 'principles', 'policy', 'strategy' 'objectives' and 'targets' is consistent with the view expressed by most interviewees, for example, a UK expert had said in the following statement:

"Understanding the inter-relationship between 'mission', 'policy', 'strategy', 'objectives and 'targets' is critical if efforts to improve academic quality are to be sustained. Implementation of 'policy' ensures that 'mission' is effectively translated into 'strategies', which in turn are translated into SMART 'objectives' and 'targets'"(UK Interviewee #4).

The above statement suggests that from strategic quality management perspective, one of the many 'right things' that a 'quality manager' as a 'leader' ought to do in order to be 'efficient' is to be personally and actively involved in formulating quality improvement policies, strategies, objectives and targets. This statement is consistent with Mullins' (1999) view on the process of policy and strategy formulation. It suggests that intimate linkages exist between 'managers', 'leaders', 'policy' and 'strategy'. This is what a TQM expert has to say:

"The fact is in most UK Higher Education Institutions not most Quality Managers are simply involved in managing the process of quality assurance under the QAA Model. It is the QAA who decides the policy and strategy; the Deans of Schools may be involved in reshaping these policies, before turning them over to Quality Managers. The TQMHEXM developed by me at Leicester encourages increase involvement of Quality Managers in policy and strategy formulation, not just the implementation and control" (UK Interviewee #13).

The view of the above interviewee suggests that the linkages identified earlier underpin the concept of TQM and TQM-driven Excellence Models. Graph 4.2 below, is a plot of the Evaluation Scores of 42 respondents for the three Policy and Strategy Practices; it appears to mimic the erratic pattern shown by Graph 4.1 above on Leadership Practices. This empirical evidence of *similarity* suggests a strong *probabilistic* or *deterministic* causality between 'leadership practices' and practices relating to 'policy and strategy'. Even though the literature strongly suggests there is a

causal relationship, most researchers do not seem to agree on is the nature of the causality – whether it is probabilistic or deterministic. The works of Kanji and Tambi (2002) suggest the relationship is a deterministic causality, however, EFQM and MBNQA scoring mechanisms, and the writings of Thompson (2003), seem to favour a probabilistic causality (EFQM, 2003a; MBNQA, 2003a).

Graph 4.2
Evaluation of Practices relating to Policy and Strategy in UK HEIs
(Source: Based on Questionnaire Part Two - Questions: 5, 6, 7)

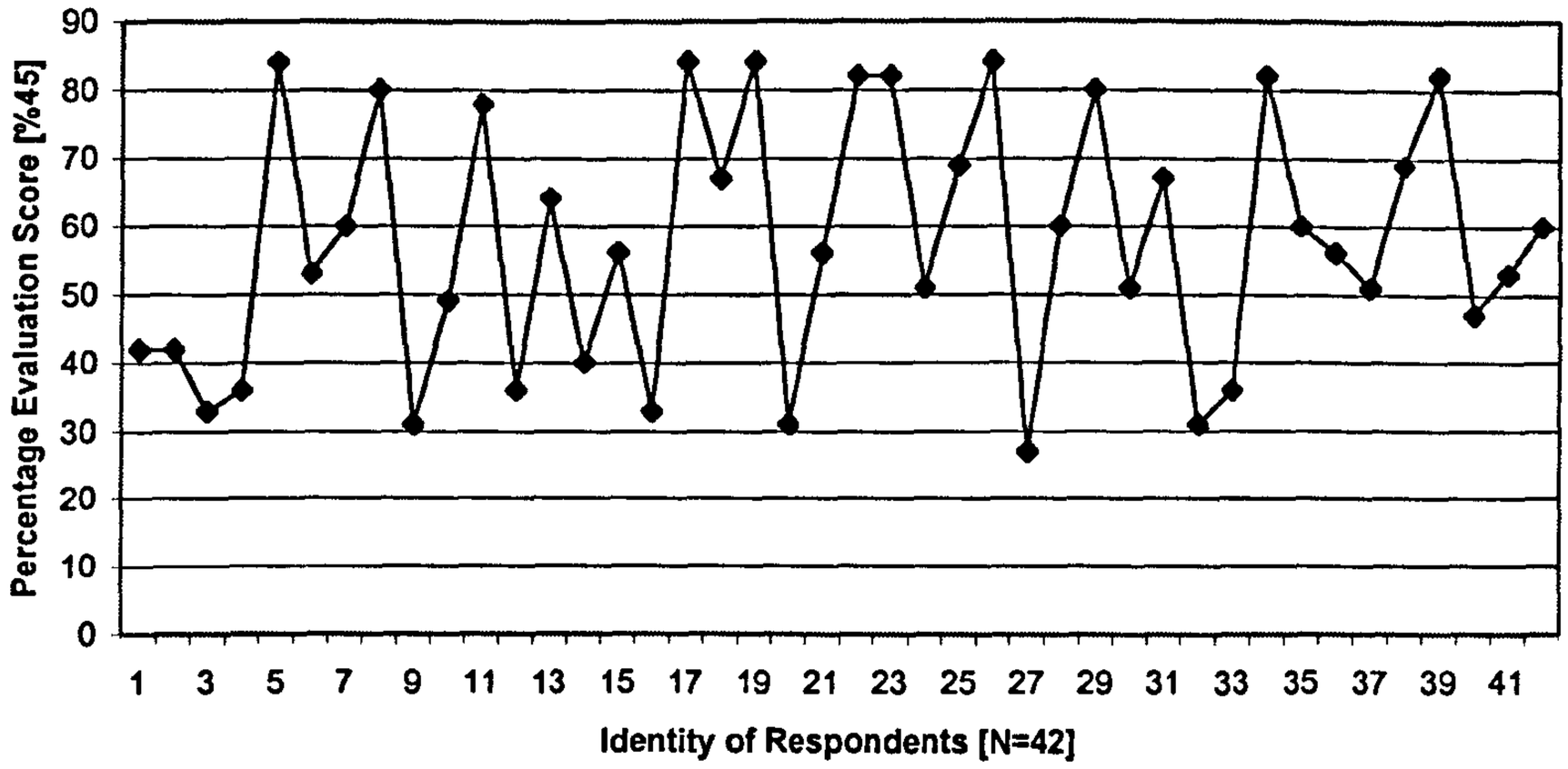
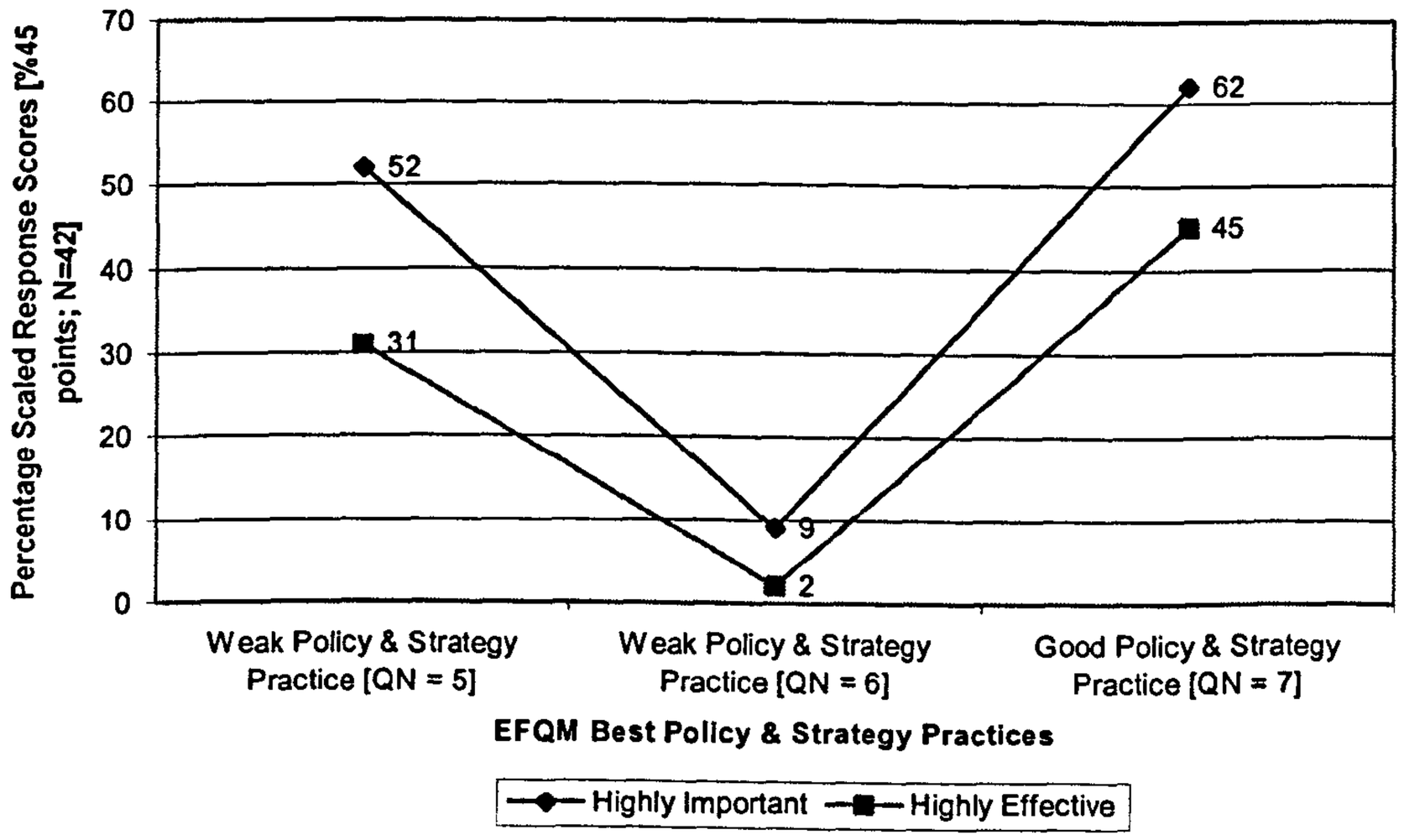


Chart 4.2
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Policy and Strategy Practices
(Source: Based on Questionnaire Part Two - Questions: 5, 6, 7)



The overall results for three Policy and Strategy Practices reveal that, most respondents thought that *two* of the *three* practices were 'weak' practices; and *one* was 'good'. The evaluation results for these three practices are briefly summarised below from a pessimist's point of view:

- *Policy and Strategy Practice QN = 5: - Described by many respondents (69%) as a WEAK PRACTICE;*
- *Policy and Strategy Practice QN = 6: - Described by majority of respondents (98%) as a WEAK PRACTICE;*
- *Policy and Strategy Practice QN = 7: - Described by many respondents (62%) as a GOOD PRACTICE;*

The fact that the three policy and strategy practices on the whole represent 'weak' practices is confirmed statistically by the test statistics. Even though, t-calculated i.e. 10.3448 is greater than the t-critical of 2.0211 - which suggests a linear relationship - the negative r-value indicates there is an inverse linear relationship between the degree of 'importance' and the degree of 'effectiveness' of policy and strategy practices. The expectation is for a strong positive linear relationship between 'importance' and 'effectiveness', as a condition for a quality management practice to be categorised as a best practice.

Chart 4.2 above, shows the 'perception gaps' or 'quality gaps' for all three practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Policy and Strategy Practices.

Policy and Strategy Practice #1 – [QN = 5]

Policy and Strategy Practice #1 – [QN = 5] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in developing quality improvement *POLICY, STRATEGY, OBJECTIVES*, and TARGETS for their respective institutions in the areas of Teaching and Research.

Policy, Strategy, Objectives, Targets
[Policy and Strategy Practice #1, Questionnaire Part Two, Question #5, QN = 5]

Quality Managers are not personally and actively working with Chancellery, Deanery and Heads of Departments to ensure quality improvement policy, strategy, objectives, and targets are based on the needs and expectations of Students, Government, Potential Employers, and other stakeholders [Code: QN22].

Table 4.3
Importance and Effectiveness Gaps for the Three Policy and Strategy Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.3A – IMPORTANCE GAP

Policy & Strategy Practices	**Relative Importance Score**	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 5]	52 **	-18	-28
#2 – [QN = 6]	95 ****	+25	+15
#3 – [QN = 7]	62 **	-8	-18

Table 4.3B – EFFECTIVENESS GAP

Policy & Strategy Practices	**Relative Effectiveness Score**	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 5]	31 *	-39	-49
#2 – [QN = 6]	2 *	-68	-78
#3 – [QN = 7]	45 *	-25	-35

Table 4.3A and 4.3B above also show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Policy and Strategy Practices. How these vital statistics impact on quality improvement policy and strategy formulation and implementation will be examined in detail in the next chapter.

The view held by many respondents (69%) that Policy and Strategy Practice #1 - is a 'Weak Practice' in terms of being seen by respondents as 'less effective'; is supported by a UK interviewee in the statement below:

"In most UK Higher Education Institutions the job of a Quality Manager is additional to Teaching and involves what I will describe as paper quality management aimed not at delivering real quality improvement but ensuring that QAA and HEFCE demands are met. This so called managers – including me - are not involved in deciding policy and strategy but are intimately involved with policy and strategy implementation"(UK Interviewee #8).

The fact that the above interviewee saw the job of a quality manager as additional to teaching, appears to suggest that, policy implementation may require the direct involvement of quality managers in the actual process of teaching. The extent to which this is beneficial in the long-term remains uncertain. Particularly in cases where the teacher himself or herself is the assessor of teaching quality or performance. A critical examination of the documentary evidence provided by respondents identified key activities carried out as part of Policy and Strategy Practice #1, which might not

have been effectively implemented, even though they were regarded as being important. From Figure 4.5 on page 232 we can see that:

***Policy:** - reference #1 to #42*

- *Policies NOT properly synthesised from Principles and Values held by managers, leaders and the institution. For example Policies on Teaching and Research Quality Improvement are not consistent with a declared Statement of Principle on Continuous Improvement.*

- *Policies on Teaching and Research Quality are NOT explicitly stated and/or explicitly based on well-defined Needs and Expectations of Students, Government, Teaching and Research Staff, and other Stakeholders. For example Results from Students and Staff Surveys are not effectively incorporated into improvement policies.*

***Strategy:** reference #1 to #42*

- *Chancellery, Deanery, Heads of Department, Quality Managers, not able defend the levels of funding required to achieve expected improvement in Teaching and Research Quality;*

- *Inefficient allocation of funding and other resources for Teaching and Research, leading to a situation where intended Strategies are considered as Practice.*

- *Weak Staff Retention strategy resulting in increasing Staff Turnover and declining Staff-student ratios.*

***Objectives and/or Targets** - reference #1 to #42*

- *Uncertainty about Funding Levels and therefore Staff Levels means improvement Objectives are reduced to broadly statements of intent, and declared percentage improvement in quality becomes irrelevant information;*

- *There is serious doubt about the 'timelines' of the declared levels of quality improvement achieved. For example is the reported percentage improvement in teaching and research quality for a particular year not the cumulative results for the past three years?*

Policy and Strategy Practice #2 – [QN = 6]

Policy and Strategy Practice #2 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in developing quality improvement *policy* and *strategy* which encourage *OWNERSHIP* and sustain *continuous IMPROVEMENTS in teaching and research PROCESSES.*

PROCESS OWNERSHIP AND IMPROVEMENT

[Policy and Strategy Practice #2, Questionnaire Part Two, Question #6, QN = 6]

Chancellery, Deanery, Heads of Departments, and Quality Managers are not able to encourage top down ownership of Processes to ensure quality improvement over a much longer period of time [Code: QN23].

The analysis of the responses to Question #6 under Questionnaire Part Two suggests that, majority of respondents (98%) thought the policy and strategy practice relating to 'efforts to strengthen process ownership by managers in leadership position, and by staff' is a 'Weak Practice'. In this example 'weak' is expressed in terms of the practice being 'less effective' despite being considered 'highly important'. The analysis revealed that very few respondents (2%) encouraged or were themselves encouraged by their superiors to own processes at both the unit i.e. departmental level and institutional level. This apparent lack of ownership of processes on the part of leadership at both the departmental and institutional levels has been noted by many interviewees, as the main reasons for lack of commitment from top management to the quality improvement process. An expert from the UK had this to say:

"From my own observation, top management at the chancellery, deanery and heads of department, are not enthusiastic about owning processes, because that makes it obligatory on them to have to do all they possibly can to meet the resource requirements of that process. I must admit that in an environment of scarce resources, process ownership in the sense of efficient allocation of scarce funding resources is indeed very difficult. It has led to misunderstanding in many departments and schools"(UK Interviewee #14).

The documentary evidence of practice provided by respondents and interviewees confirms the view held by majority of respondents (95%) that 'process ownership' is highly important. This is supported by responses to Question #4 under Questionnaire Part One, which suggest there have been continuous effort to sustain this practice through formal top-down decision-making structures at the institutional level dedicated to implementing quality improvement policy and strategy. The possible reasons why these efforts seem not to have worked well could be found in the following activities, which might not have been carried out effectively. From Figure 4.5 we can see that:

***Ownership of Processes:** - reference #1 to #42*

- *Weak ownership because tasks, activities, and functions making up a PROCESS are not well defined and documented; resulting in staff at all levels of management and leadership not knowing the boundaries of responsibility, accountability and support;*

- *Job Descriptions show extensive overlaps in the actual work Teaching and Research Staff are expected to carry out resulting in duplication of effort waste of time and inefficient resource allocation;*

- *Job Specifications do not effectively match individual ability with the task that needs performing; and where a Teaching or Research Staff is giving a task because of the potential they have shown, there is not much support to go along with it.*

Improvement of Processes: reference #1 to #42

- *Process Performance not accurately Measured;*

- *Not many Teaching and Research Managers and Staff are directly involvement in setting Teaching and Research Quality Improvement Strategies, Objectives and Targets; this has weakened their commitment to process improvement;*

- *Resource allocation for Process Improvement is not based on the concept of internal customers and suppliers, as a result there is lack of continuity in the flow of resources to managers and staff.*

Policy and Strategy Practice #3 – [QN = 7]

Policy and Strategy Practice #3 – as briefly described below - relates to the extent to which respondents - are personally and actively involved in developing quality improvement *policy* and *strategy* which encourage the use of *DATA, INFORMATION, INTELLIGENCE,* and *KNOWLEDGE* to sustain continuous improvement in teaching and research quality.

INFORMATION, INTELLIGENCE, KNOWLEDGE
[Policy and Strategy Practice #3, Questionnaire Part Two, Question #7, QN = 7]

Chancellery, Deanery, Heads of Department and Programme Leaders personally and actively involved in using relevant data and information gathered from the internal and external environment for decision-making [Code: QN24].

Analysis of the responses to Question #7 under Questionnaire Part Two, revealed that a reasonable number of respondents (45%) thought Policy and Strategy Practice #3 is an example of a 'Good Practice'. This fact is confirmed by many interviewees who suggested that, this practice could be improved by educating staff on the strategic importance of data, information, intelligence and knowledge, and its effectiveness in helping to sustain departmental and institutional competitive advantage. This is what one interviewee said:

"There is evidence of management by misinformation, some decisions are not based on fact. To use today's terminology, instead of management by facts, we have management by spin. This in our case has led to more uncertainty among members of staff and sometime students" (UK Interviewee #15)

The documentary evidence of practices provided by respondents and interviewees confirms the view held by many respondents (62%) that 'data, information, intelligence, and knowledge' are strategically 'highly important'. The main reasons why these efforts seem not to work well could be found in the following activities, which might not have been carried out effectively. From Figure 4.5 we can see that:

Data: - reference #1 to #42

- *Inaccurate and irrelevant Data;*
- *Not well source and out of date.*

Information: reference #1 to #42

- *Information overload resulting from weak policy regarding data collecting storage, retrieval, and management;*
- *Increasing use of irrelevant information for Decision-making has led to management by misinformation rather than by facts.*

Intelligence: reference #1 to #42

- *Inability to reduce Staff Turnover, resulting in staff with the relevant skills taking up better offers in rival institutions;*
- *Lack of dedicated Marketing Departments separated from Business or Management Schools have led to weak Marketing Intelligence Systems, and weak Marketing Strategies for promoting institutional brand and reputation.*

Knowledge - reference #1 to #42

- *Approach to Managing Knowledge is based mainly on retrospective rather than on both retrospective and prospective data, information, and intelligence;*
- *Not acting effectively on feedback from important sources such as Students, External Examiners, QAA, HEFCE and potential Employers; because of funding and staff retention problems.*

In summary, the overall 'weakness' in policy and strategy practices is confirmed statistically by the negative product-moment coefficient i.e. r = - 0.853, even though the t-calculated value is greater than the t-critical value. This is because the linear relationship between the degree of 'importance' and the degree of 'effectiveness' is 'negative' or 'inverse' compared with the expected 'positive' linear relationship for best practices. The fact that there is a linear relationship between 'importance' and 'effectiveness' is therefore not enough the relationship has to be 'positive' in order to categorise a quality management practice as a best practice. Figure 4.5, below is an attempt to bring together the key policy and strategy practices, under a single framework for encourage Quality Managers to become strategically aware of the environment they work in. It is a framework, which suggests a complex situation requiring strengthening of the link between 'managerial leadership' and 'formulation and implementation of policy and strategy for quality improvement'.

POLICY, STRATEGY, OBJECTIVES, TARGETS
[Policy and Strategy Practice #1, Questionnaire Part Two, Question #5, QN = 5]

Policy:

- *Policies NOT properly synthesised from Principles and Values.*
- *Policies on Teaching and Research Quality are NOT explicitly stated.*

Strategy:

- *Chancellery, Deanery, Heads of Department, Quality Managers, not able defend the levels of funding;*
- *Inefficient allocation of funding and other resources for Teaching and Research.*
- *Weak Staff Retention strategy resulting in rising Staff Turnover and Staff-student ratios.*

Objectives and/or Targets:

- *Uncertainty about Funding Levels and therefore Staffing Levels;*
- *Doubt about the 'timelines' of the declared levels of quality improvement achieved.*

Figure 4.5
Osseo-Asare'e Framework for Effective Policy and Strategy for Academic Quality

INFORMATION, INTELLIGENCE, KNOWLEDGE
[Policy and Strategy Practice #3, Questionnaire Part Two, Question #7, QN = 7]

Data:

- *Inaccurate and irrelevant Data;*
- *Not well sourced and out of date.*

Information:

- *Information overload resulting from weak information management policy;*
- *Increasing use of irrelevant information for Decision-making.*

Intelligence:

- *Inability to reduce Staff Turnover;*
- *Lack of dedicated Marketing Departments.*

Knowledge:

- *Approach to Managing Knowledge is Retrospective;*
- *Not acting effectively on feedback from important sources.*

PROCESS OWNERSHIP AND IMPROVEMENT
[Policy and Strategy Practice #2, Questionnaire Part Two, Question #6, QN = 6]

Ownership of Processes:

- *Tasks, activities, and functions making up a PROCESS are not well defined and documented;*
- *Job Descriptions show extensive overlaps in the actual work Teaching and Research Staff are expected to carry;*
- *Job Specifications do not effectively match individual ability with Task.*

Improvement of Processes:

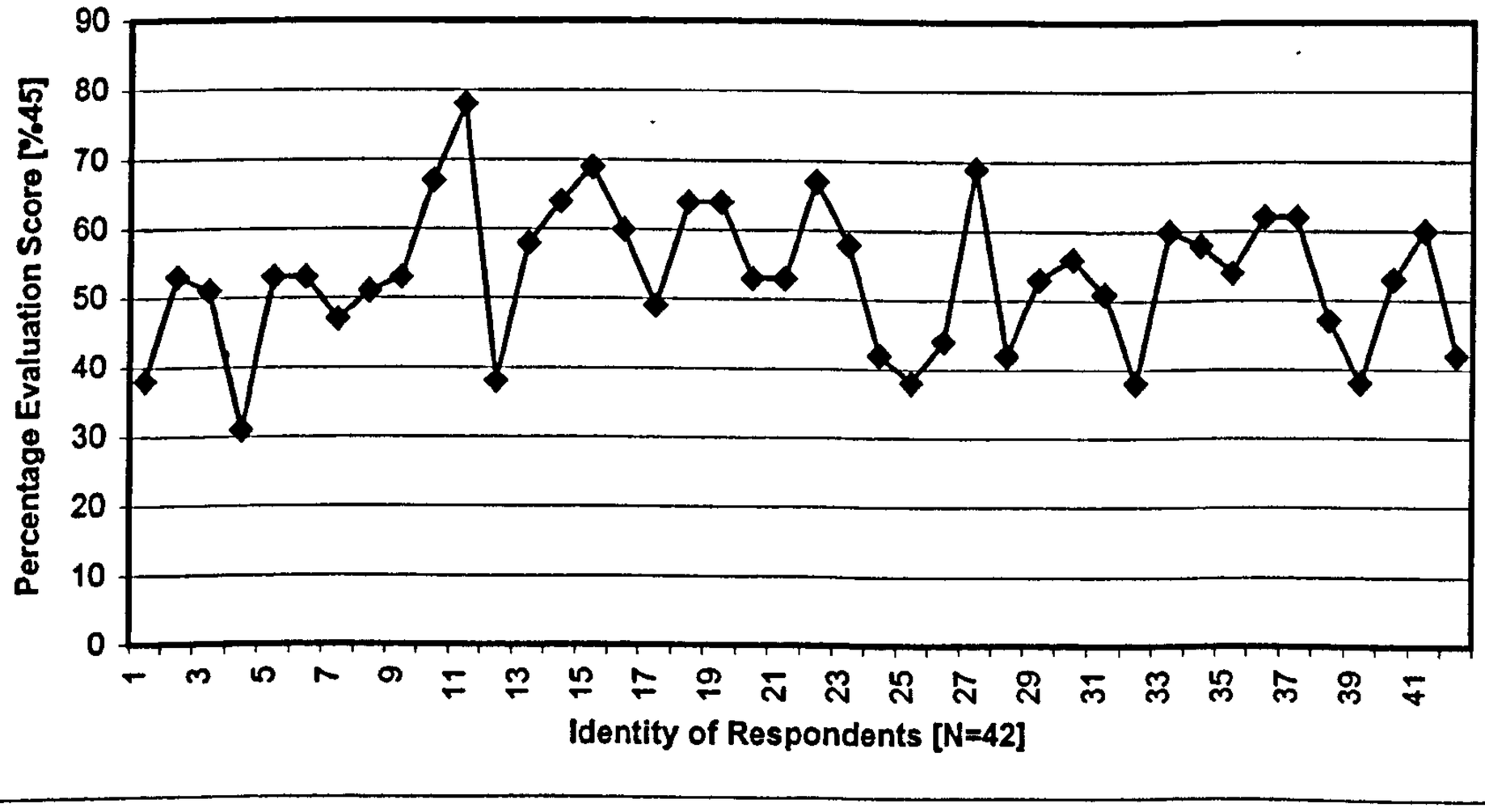
- *Process Performance not accurately Measured;*
- *Not many Teaching and Research Managers and Staff are directly involvement in setting Teaching and Research Quality Improvement Strategies, Objectives and Targets;*
- *Resource allocation for Process Improvement is not based on the concept of internal customers and suppliers.*

C. Best Practices for Effective Staff Management

The literature shows that Human Resource Management (HRM) is an integral part of strategic management concerned with the effective utilisation of all staff or personnel working within a higher education institution (Warner and Crosthwaite, 1995:3; Thompson, 2003). The works of Powell (1995), and Oakland (2003), suggest that policies and strategies relating to staff and quality improvement ought to be aligned strategically. From strategic quality management perspective, both the 'hard' and 'soft' aspects of quality management ought to be integrated in order to maximise the benefits of synergies (Marchington and Wilkinson, 1996; Thompson, 2003).

Graph 4.3 below, is a plot of the Evaluation Scores of 42 respondents for the three Staff Management Practices; it appears to mimic the erratic patterns shown by Graph 4.1 and Graph 4.2 above on practices relating to 'Leadership' and 'Policy and Strategy'. This empirical evidence of *similarities* suggests a strong *probabilistic* or *deterministic* causality between 'leadership', and 'staff management' through 'policy and strategy' - which appears to cement the bond between 'leadership' and 'subordinate staff'. If this indeed is the case, then it is suggestive of the fact that a weak policy and strategy will tend to weaken the relationship between leaders and their subordinate staff, with serious implication for co-ordinating efforts to achieve expected quality improvement objectives and targets.

Graph 4.3
Evaluation of Staff Management Practices in UK HEIs
(Source: Based on Questionnaire Part Two - Questions: 8, 9, 10)



The overall results for the three Staff Management Practices reveal that, majority of respondents thought that all *three* practices were 'weak' practices'. The evaluation results for these three practices are briefly summarised below from a pessimist's point of view:

- *Staff Management Practice QN = 8: - Described by majority of respondents (95%) as a WEAK PRACTICE;*
- *Staff Management Practice QN = 9: - Described by majority of respondents (93%) as a WEAK PRACTICE;*
- *Staff Management Practice QN = 10: - Described by majority of respondents (98%) as a WEAK PRACTICE.*

The fact that the three staff management practices on the whole represent 'weak' practices is confirmed by the test statistics. The t-calculated value of 12.0162 is greater than the t-critical of 2.0211 - suggesting there is a linear relationship between the degree of 'importance' and the degree of 'effectiveness' of staff management practices. However, the r-value is 'negative' indicating an inverse relationship. The expectation is that the linear relationship between 'importance' and 'effectiveness' ought to be 'positive' for the staff management practice to be categorised as a best practice.

Chart 4.3
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Staff Management Practices
(Source: Based on Questionnaire Part Two - Questions: 8, 9, 10)

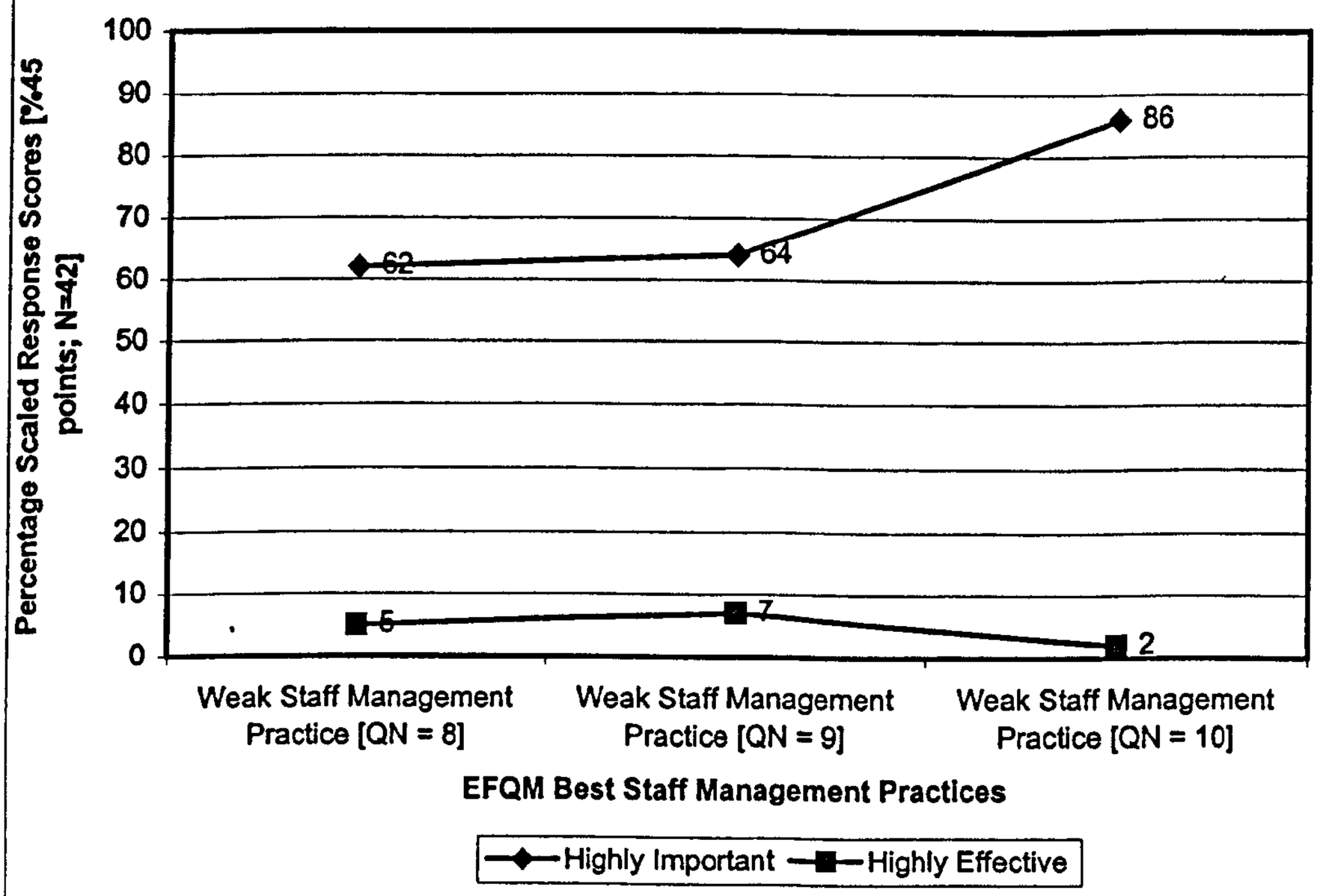


Chart 4.3 above, shows the 'perception gaps' or 'quality gaps' for all three practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Staff Management Practices.

Staff Management Practice #1 – [QN = 8]

Staff Management Practice #1 – [QN = 8] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in developing quality improvement policy and strategy to match with actual levels of STAFF PERFORMACE, and not the levels of performance desirable.

Staff Performance, Policy and Strategy
[Staff Management Practice #1, Questionnaire Part Two, Question #8, QN = 8]

Chancellery, Deanery, Heads of department, and Quality Managers not personally and actively involved in the alignment of Quality Improvement Policy, Strategy, Objectives and Targets to the actual quality improvement tasks that individual Staff Perform [Code: QN25].

The analysis of the Question #8 in Questionnaire Part Two suggests that many respondents (95%) thought that the practice of alignment of policy and strategy to staff performance is a 'Weak Practice' in terms of being 'less effective'. The results show best practices exist in the area of 'Staff Performance'. However, the responses to Questions #1, #2, and #3 in Questionnaire Part One, provide evidence to confirm that, some job positions are not within the formal structure for quality management. Also they are no job descriptions and specifications, and staff who are asked to perform in these positions do not have many years experience on the job. This is confirmed by the views of an expert in the UK.

"The high staff turnover in some departments have had negative impact on our ability to maintain qualified staff in a job position for long. This is the common reason for not having staff with many years experience on the job. Academics with very little experience in the specific area of teaching and learning quality are doing the job of quality experts. Mind you, what this people bring into academia is their experience from a commercial environment – for me, that is not good enough. I have serious reservation about the suitability of commercial quality models in higher education. Administrators with no experience in academic work are now responsible for Academic Quality. The truth is what they actual do on day-to-day basis is paper work."(UK Interviewee #4)

The above interviewee identified ' staff turnover ratios' as a critical success factor, which needs regular monitoring for two main reasons. First, the inability of individual

higher education institutions to retain staff on the same job for a long period of time before moving them to any job has serious implications for sustaining continuous quality improvement in teaching and research. Second, as the above interviewee suggests, the context in higher education is not the exactly the same the context provided by industry and commerce - raising questions about the suitability of commercially developed models and tools for quality assessment in higher education.

Table 4.4A and 4.4B below show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Staff Management Practices. How these vital statistics impact on staff management decisions for quality improvement will be examined in detail in the next chapter.

Table 4.4
Importance and Effectiveness Gaps for the Three Staff Management Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.4A – IMPORTANCE GAP

Policy & Strategy Practices	Relative Importance Score	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 8]	62 **	-8	-18
#2 – [QN = 9]	64 **	-6	-16
#3 – [QN = 10]	86 ****	+16	+6

Table 4.4B – EFFECTIVENESS GAP

Policy & Strategy Practices	Relative Effectiveness Score	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 8]	5 *	-65	-75
#2 – [QN = 9]	7 *	-63	-73
#3 – [QN = 10]	2 *	-68	-78

The view held by majority of respondents (95%) that Staff Management Practice #1 - is a 'Weak Practice' in terms of being 'less effective' in delivering significant improvement in teaching and research quality; is supported by a UK interviewee in the statement below:

"It is a well known fact that the Staff Budgets is large, much of which is taken up in salaries to staff who do little to improve the quality of teaching and research. The association between 'salaries' and 'actual levels of quality improvement' is subjective and speculative; it is not based on fact. Perhaps because improvement policies and strategies are not effectively aligned to actual levels of staff performance"(UK Interviewee #7).

As the above expert suggests, without enough funding, the deficit in the budget for staff salaries and other expenses will widen over a long period of time. The

implication for teaching and research quality improvement is that, a funding gap equates to teaching and research quality gaps - for the simple reason that, there will not be enough money to spend on quality improvement operations. The normal practice will be to cost reduction, which generally tends to impact on the quality of delivery in a service organisational setting. A critical examination of the documentary evidence provided by respondents identified key staff management activities linked to Staff Management Practice #1, which might not have been effectively implemented, even though they were regarded as being important.

***Policy and Strategy:** - reference #1 to #42*

- *Feedback from Students and Staff Surveys are not effectively incorporated into Teaching and Research Quality Improvement Policies and Strategies;*
- *Funding and other resources required to achieve expected improvements in Teaching and Research Quality never materialise;*
- *Absence of a deliberate Policy and Strategy to reduce Staff Turnover and maintain acceptable Staff-student ratios.*

***Performance:** reference #1 to #42*

- *Internal Performance Appraisal and Performance Management Systems are designed to enhance External Reporting and therefore the reputation of the institution as a whole, and not to address directly serious issues relating to the reasons why staff with high potential are not performing well;*
- *Lack of regular maintenance and increased investment in teaching and research infrastructure is blamed on Funding Backlogs, which are linked to Teaching and Research Quality and Staff Performance Gaps.*

Staff Management Practice #2 – [QN = 9]

Staff Management Practice #2 – as briefly described in the box below - relates to the extent to which respondents - are personally and actively involved in developing quality improvement *policy* and *strategy* which encourage *STAFF EMPOWERMENT.* It involves training and developing staff to assume *LEADERSHIP* in order to sustain continuous improvement efforts once they begin. The analysis of the responses to Question #4, and #9 under Questionnaire Part One and Two respectively, suggest that, majority of staff operate within formal structures at the institutional and departmental level. It also suggests that the practice of empowering staff through delegation of authority and training staff to become future leaders is encouraged to some extent.

STAFF EMPOWERMENT, LEADERSHIP

[Staff Management Practice #2, Questionnaire Part Two, Question #9, QN = 9]

Chancellery, Deanery, Heads of Departments, and Quality Managers not very enthusiastic about personally and actively involved in developing a succession plan and in training their subordinates to become future Quality Managers and Leaders [Code: QN26].

The responses to Question #9 under Questionnaire Part Three, revealed that 'staff empowerment and leadership' is a highly important measure of staff perception of institutional quality and performance. The views of some experts in the UK however suggest that, the practice of empowerment and leadership has not been successfully implemented in most UK HEIs - a view shared by an expert in the UK in the statement below:

"Pre-1992 institutions like Oxford and Cambridge are better at maintaining low staff turnover, high staff morale and satisfaction, but for those of us in the post-1992 universities we simply do not have enough funds to sustain the long term interests of our staff. The strategy of not promising much may have led to staff dissatisfaction and high staff turnover"(UK Interviewee #6)

The documentary evidence of practices provided by respondents and interviewees suggest that, these efforts seem not to have worked well because the following key activities might not have been carried out effectively.

***Empowerment:** - reference #1 to #42*

- *Lip-service is being paid to real staff involvement by not incorporating staff experiences, ideas and suggestions in the process of improving Teaching Quality Assessment and Research Assessment Exercises Scores. Some blame this situation on lack of funding and other teaching and research resources;*
- *Little or no delegation of Authority and Responsibility to subordinate staff, as a result Teaching and Research Quality Improvement decisions are delayed or not made;*
- *Decline in Job satisfaction has led to decline in Staff Commitment to Teaching and Research Quality Improvement. This is partly blamed on the failure of the Chancellery, Deanery and Heads of Department to match their promises of staff involvement with action.*

***Leadership** - reference #1 to #42*

- *Leadership Training and Development Schemes are selective and are not based on well-defined training gaps;*
- *Absence of succession planning, because of top management desire to maintain the status quo.*

Staff Management Practice #3 – [QN = 10]

Staff Management Practice #3 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in

the development of quality improvement *policy* and *strategy,* which encourage staff *SUPPORT, MOTIVATION,* and *REWARDS.* Some believe this will help sustain continuous improvement in teaching and research quality. The practice Quality Managers in leadership position, personally and actively involving themselves in providing support and motivating staff to achieve set quality improvement objectives is seen by majority of respondents (86%) as 'highly important' but 'less effective' – because it is not successfully implemented.

STAFF SUPPORT, MOTIVATION, REWARDS
[Staff Management Practice #3, Questionnaire Part Two, Question #10, QN = 10]

Quality Managers and Programme Leaders personally and actively involved in empowering and motivating subordinate staff in order to achieve stated Teaching and Research Quality Improvement Objectives and Targets [Code: QN27].

This is a strategic error of judgement but not a surprising result. This is because, the analysis of the responses to Question #3 in Questionnaire Part Two shows that, majority of Quality Managers in leadership position were not enthusiastic about being personally and actively involved in 'empowering' and 'motivating' subordinate staff, even though they thought it was 'important'. Majority of interviewees attributed this strategic error of judgement to the leadership style adopted by most Quality Managers and Programme or Subject Leaders in UK higher education institutions, which requires managers to obtain improvement results by close 'inspection' and 'control' of the actual task carried out by their subordinates.

These results are confirmed by the analysis of the response to Question #11 under Questionnaire Part One, which indicates majority of respondents (98%) are still under the influence of Quality Assurance Agency (QAA) 'inspection-based' regimes. A regime which some believe encourage leadership by close 'inspection' of the actual task carried out by sub-ordinate staff, rather than leadership by coaching, support, motivation and empowerment of subordinates. Majority of interviewees in the UK also confirmed that Staff Management Practice #3 is a 'weak' practice. This is what one interviewee said:

"It is not that strategist and policy makers do not know what to do, but it is more to do with how to manage and provide leadership in a situation where money is simply not available or insufficient to meet our short-term obligations" (UK Interviewee #15.)

The documentary evidence of practices provided by respondents and interviewees identifies key activities, which might be the root causes of Staff Management Practice #3 being described as a weak practice.

***Support** - reference #1 to # 42*

- *Weak support from superiors and Team Members; which is partly blamed on the lack of inter-personal skills;*
- *Irregular flow of funding and other resources to sustain teaching and research quality improvement activities.*

***Motivation** - reference #1 to #42*

- *Teaching and Research in some institutions is increasing becoming a source of anxiety, resulting in low morale, affecting health and family relationships;*
- *Increasing work-loads because of rising student numbers; staff-student ratio and staff turnover, has created a work environment which has become very stressful This is particularly the case for institutions who do not have a deliberate strategy to deal with the situation.*

***Rewards** - reference #1 to #42*

- *Lack of recognition, and personal feeling of achievement. This is particularly the case in post-1992 institutions where research-active staff are increasing been asked to focus on Teaching and Administrative work rather on research and some teaching;*
- *Lack of Promotion in line with career objectives of Teaching and Research Staff. In some institutions, senior lecturers due for promotion to Readership and Professorship are told to wait because of budgetary constraints.*

In summary, the overall 'weakness' in staff management practices is confirmed statistically by the negative pearson product-moment correlation coefficient (r) value of r = - 0.885. Even though the value of t-calculated i.e. 12.0162, clearly suggest that, there is a linear relationship between the degree of 'importance' and the degree of 'effectiveness', the downside is that, the relationship is 'inverse' or 'negative' when it should have been a 'positive' one. This means the dual requirement of 'linear' and 'positive' relationship between relative 'importance' and relative 'effectiveness' has not been satisfied simultaneously.

Figure 4.6 below presents a framework for effective management of staff management best practices for academic quality improvement. It represents an attempt to bring together all the key staff management practices and critical success factors under a single framework, in order to encourage Quality Managers to become strategically aware of the *human factor* in educational management and leadership effort to sustain continuous improvement in Teaching and Research Quality.

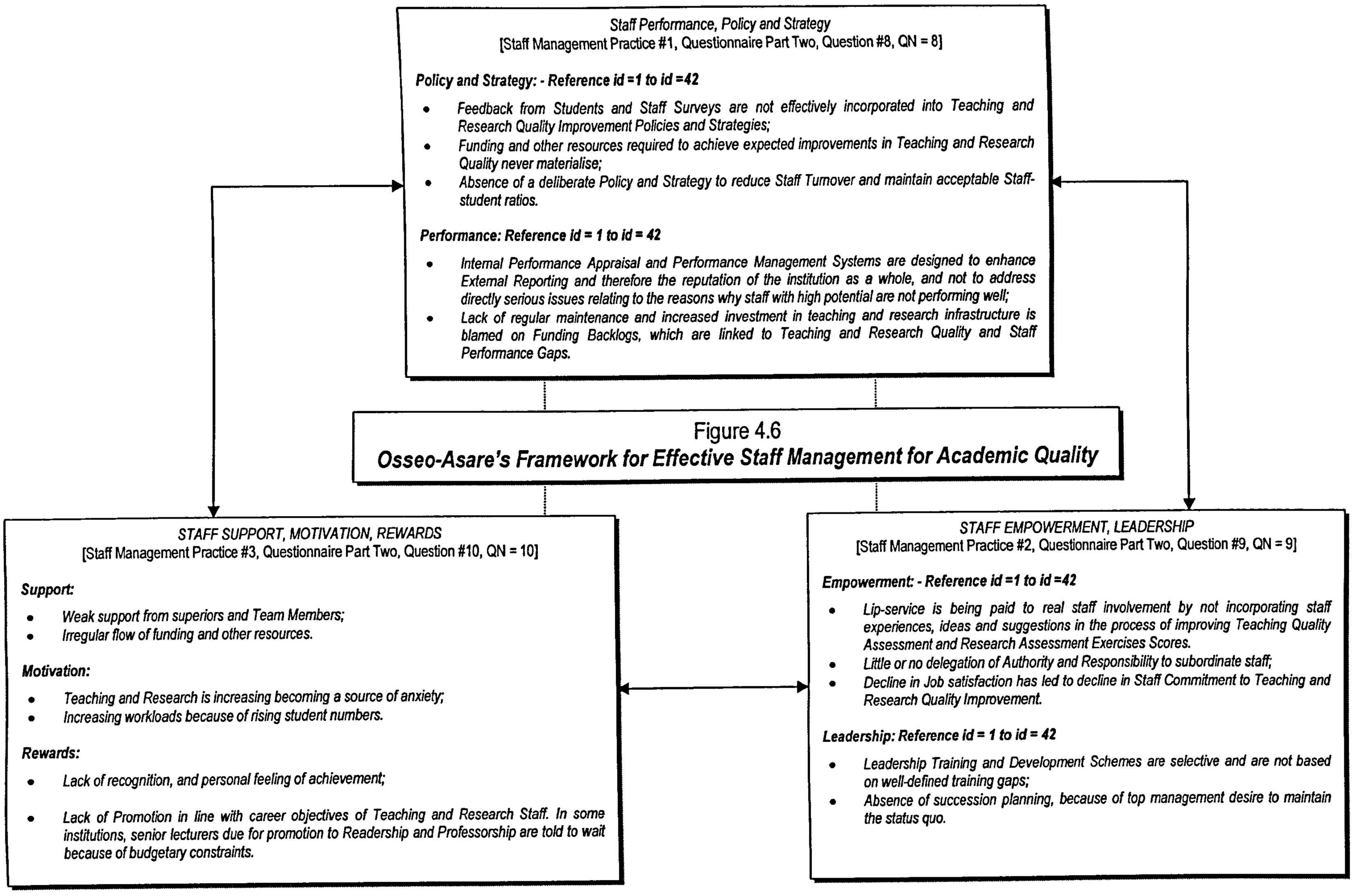
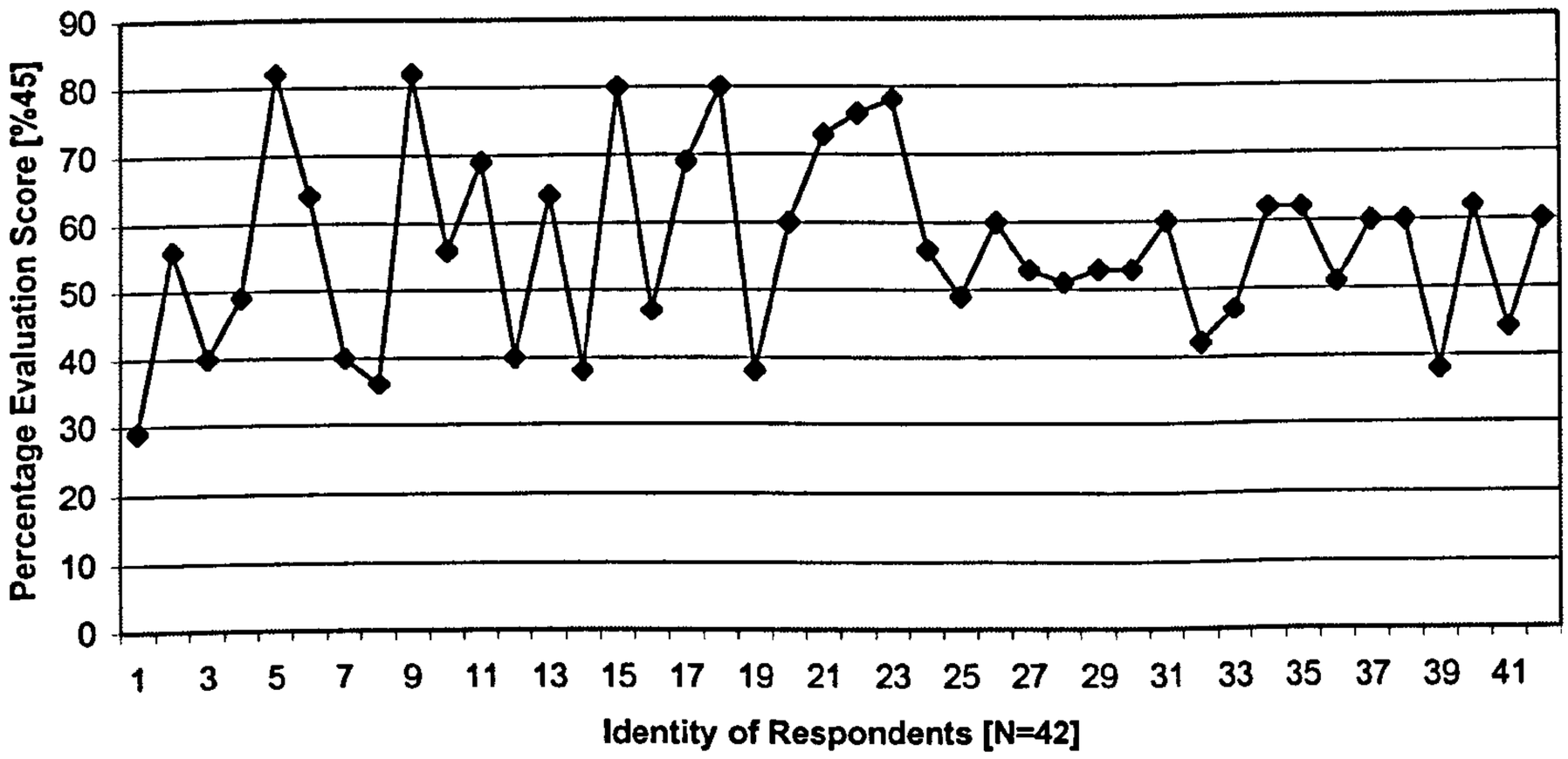


Figure 4.6
Osseo-Asare's Framework for Effective Staff Management for Academic Quality

D. Best Practices for Effective Management of Resources

Financial and non-financial resources combine in different ways to secure the sovereignty and autonomy of a higher education institution (Barnes, 1999). The literature suggests that without an independent flow of such resources, publicly funded institutions will find it increasingly difficult to close the 'funding gap', which in turn widens the 'quality gap' (Williams, 1999; McNay, 1999). Graph 4.4 below, is a plot of the Evaluation Scores of 42 respondents for the three Resources and Partnership Practices; it appears to mimic the erratic patterns shown by Graph 4.1; Graph 4.2; and Graph 4.3 above on practices relating to 'Leadership', 'Policy and Strategy', and 'Staff Management'. This empirical evidence of *similarities* suggests a strong *probabilistic* or *deterministic* causality between 'leadership', 'staff management', and 'resources and partnerships' through 'policy and strategy'. If this indeed is the case, then it is suggestive of the fact that a weak policy and strategy will tend to weaken the relationship between key quality management practices, with serious implication for sustaining quality improvement.

Graph 4.4
Evaluation of Resources and Partnerships Practices in UK HEIs
(Source: Based on Questionnaire Part Two - Questions: 11, 12, 13)



The overall results for the three Resources and Partnership Practices revealed that, majority of respondents thought that *two* out of the *three* practices were 'weak practices', and *one* was a *'good practice'*. The evaluation results for these three practices are briefly summarised below from a pessimist's point of view:

- *Resources and Partnership Practice QN = 11: - Described by majority of respondents (93%) as a WEAK PRACTICE;*
- *Resources and Partnerships Practice QN = 12: - Described by majority of respondents (86%) as a WEAK PRACTICE;*
- *Resources and Partnerships Practice QN = 13: - Described by many of respondents (50%) as a GOOD PRACTICE.*

The fact that the three 'resource and partnership' practices on the whole represent 'weak' practices is confirmed by the test statistics, which show that, the t-calculated value of 6.0412 is greater than the t-critical value of 2.0211 - suggesting the null hypothesis that there is no linear relationship should be rejected. With a positive r-value of +0.691, it confirms that, there is a positive linear relationship between the degree of 'importance' and the degree of 'effectiveness' of resource and partnership practices. However, the positive relationship is only 'moderately' strong - as expected for weak practices. The expectation for best practices however, is that, the r-value should be near +1 representing a very strong positive linear relationship.

Chart 4.4
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Resources and Partnership Practices
(Source: Based on Questionnaire Part Two - Questions: 11, 12, 13)

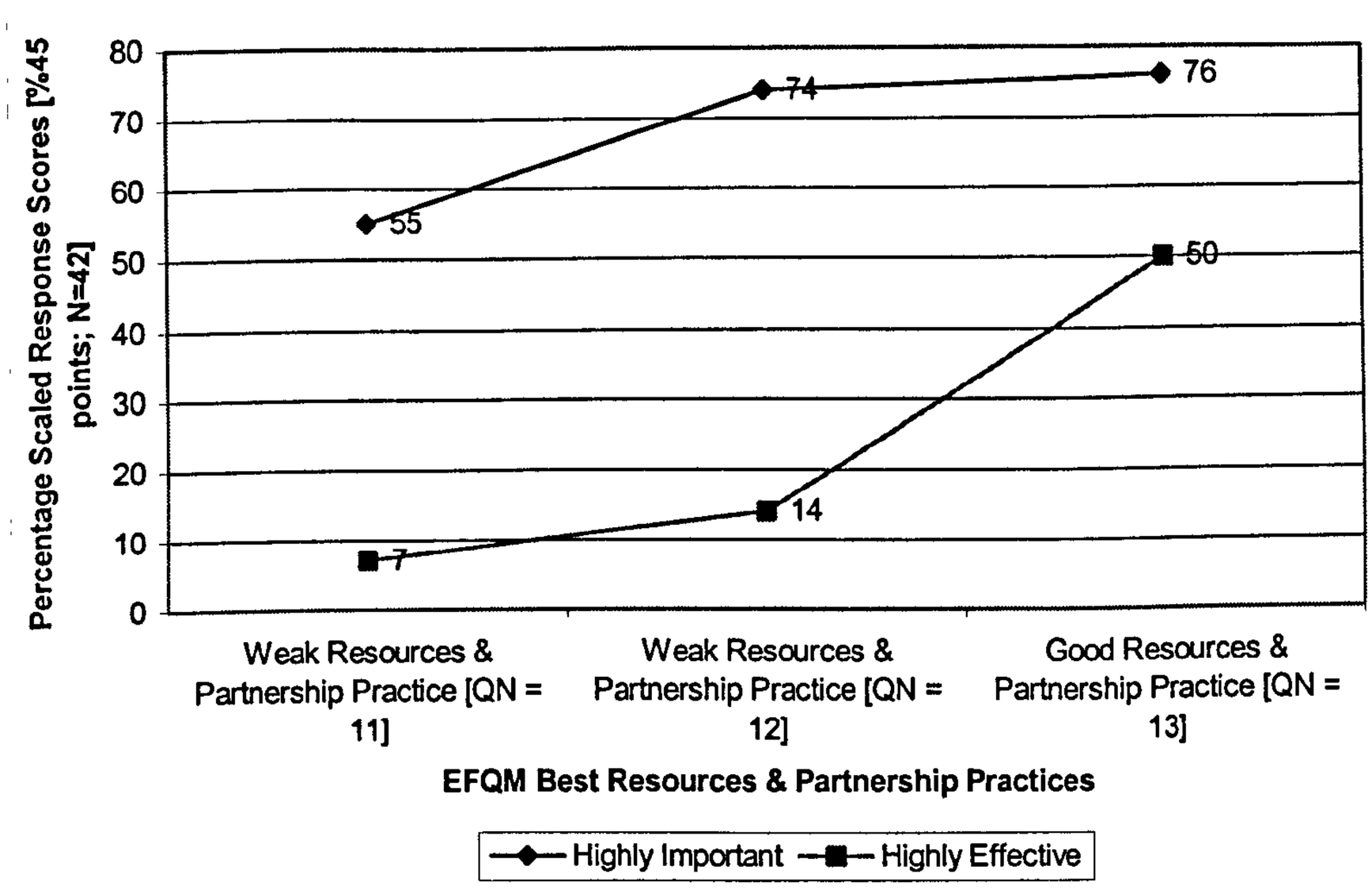


Chart 4.4 above, shows the 'perception gaps' or 'quality gaps' for all three practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Resources and Partnership Practices.

Resources and Partnership Practice #1 – [QN = 11]

Resources and Partnership Practice #1 – [QN = 11] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in the acquisition and allocation of scarce resources for teaching and research quality improvement. The analysis of the responses to Question #11 in Questionnaire Part Two, suggests that, some respondents (55%) thought that the practice of CREATING and sustaining SYNERGIES is a 'Weak Practice' in terms of being considered by some respondents as 'moderately important' and 'less effective'. This is confirmed by the views of an expert in the UK.

"It is now in vogue to see institutions with similar missions teaming up to share common resources. This is made possible by the personal involvement of top-level leadership - usually on recommendation from lower level managers and programme leaders. In institutions where chancellors, Deans and Heads of department do not have many contacts within the Higher Education Industry and the Private sector, opportunities to diversify sources of funding and teaching and research resources are missed"(UK Interviewee #3).

Creating and Sustaining Synergies

[Resources and Partnership Practice #1, Questionnaire Part Two, Question #11, QN = 11]

Chancellery, Deanery, Heads of Departments, Quality Managers and Programme Leaders personally and actively involved in identifying areas of potential synergies, creating and sustaining synergies through cost-effective use of scarce resources [Code: QN28].

Table 4.5
Importance and Effectiveness Gaps for the Three Resources and Partnership Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.5A – IMPORTANCE GAP

Resources & Partnerships	**Relative Importance Score**	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 11]	55 **	-15	-25
#2 – [QN = 12]	74 ***	+4	-6
#3 – [QN = 13]	76 ***	+6	-4

Table 4.5B – EFFECTIVENESS GAP

Resources & Partnerships	**Relative Effectiveness Score**	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 11]	7 *	-63	-73
#2 – [QN = 12]	14 *	-56	-66
#3 – [QN = 13]	50 *	-20	-30

Table 4.5A and 4.5B above also show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Resources and Partnership

Practices. How these vital statistics impact on staff management decisions for quality improvement will be examined in detail in the next chapter.

Even though 'best practices' exist in this area of 'synergies', there is evidence that leadership at the chancellery, deanery, and heads of departments do not often go out of their way to deliberately seek out areas for potential synergies and to create synergies where none existed. This is confirmed by the views of one expert in the UK.

"All we want to do the job are enough resource. Almost very year we just do not get enough from funding allocations to achieved planned levels of improvement. So when we get the opportunity to receive more money, I guess we become a little greedy – all deans and heads of department want to do is to spend without any defined plan. This unfortunately has led in some cases to inefficient use of resources and/or misappropriation of funds. Sometime the moneys are not even used and are returned because they were not planned for"(UK Interviewee #3)

From the view expressed by the above interviewee, we can see that, resource availability, allocation, and effective utilisation is a critical success factor in the effort to sustain teaching and resource quality improvement. An examination of the documentary evidence provided by respondents revealed key activities - outlined below - linked to Resources and Partnership Practice #1, which might not have been effectively implemented, even though they were regarded as being important. From Figure 4.7 on page 249 we can see that:

Creating Synergies: - reference #1 to #42

- *Even though there is recognition that funding and other teaching and research resources are scarce, only a hand-full of institutions have in place deliberate strategies for creating synergies in areas common to teaching, learning, research and scholarship; and in academic, administrative and support-service areas;*

- *Synergy is equated to Cost-cutting measures rather than Efficiency of Resource Allocation – a strategic error of judgement.*

Sustaining Synergies: - reference #1 to #42

- *Areas of synergies existing between Teaching and Learning; Learning and Scholarship; Teaching and Research; Research and Scholarship; and between academic and administrative; academic and support-services; and administrative and support-services are not fully exploited; resulting in missed opportunities and spiralling costs of bureaucracy;*

- *Most academics and administrators lack the skill for effective management of interfaces between academic and administrative activities; teaching and research; and scholarship and research.*

Resources and Partnership Practice #2 – [QN = 12]

Resources and Partnership Practice #2 – as briefly described below - relates to the extent to which, respondents are personally and actively involved in identifying

different SOURCES of FUNDING in order to sustain continuous flow of funding and other teaching and research resources for quality improvement.

DIVERSIFICATION OF SOURCES OF FUNDING

[Resources and Partnership Practice #2, Questionnaire Part Two, Question #12, QN = 12]

Chancellery, Deanery, and Heads of Departments, Heads of Department, and Programme Leaders personally and actively involved in identifying different sources of funding to help improve the quality of teaching and research [Code: QN29].

The analysis of the responses to Question #12 in Questionnaire Part Two suggests that, most respondents (74%) thought that the practice of finding other sources of funding is an example of a 'Weak Practice' in terms of being seen to be 'highly important' yet 'less effective'. The fact that only a few respondents (14%) said they were personally and actively involved' in efforts to find new sources of funding suggest that, the practice was not effectively implemented because of lack of top leadership involvement. The two statements below confirm this lack of involvement by top leadership in identifying new sources of funding:

"I guess some in leadership position see fund raising as the sole responsibility of a Fund Raiser and not of the chancellery, deanery or head of department. In some ways this is right, but I think all managers in leadership position ought to help collect data, information, and intelligence, which will help identify potential sources of funding for specific projects. There after the work of going after the money, receiving it and allocating it must go to the Fund-raiser through the Finance Department for purposes of accountability"(UK Interviewee #8).

"My responsibility under State Relations includes identifying very influential people with ideal money they wish to invest in order to have their names immortalised. It involves intelligence gathering about the where about of these people - in particular alumni members. So I can go with a 'begging bowl' to collect something from them. The truth is, it is a delicate business requiring tact and sensitivity, but there is a lot of goodwill out there for further development of higher education"(US Interviewee #3).

The documentary evidence of practices provided by respondents and interviewees confirms that, majority of institutions (74%) see this practice as 'highly important'. However, only a few institutions are actually actively involved in devoting more time and effort to diversifying their sources of funding, as a consequence, diversification strategies are not effectively implemented. The documentary evidence of practices provided by respondents and interviewees suggest that, these efforts seem not to have worked well because the following key activities – shown in Figure 4.7 below - might not have been carried out effectively:

Areas of Weakness Needing Funding: - reference #1 to #42

- *Lack of skill and facilities for teaching students with disabilities;*
- *Inability to help students move from surface-learning to deep-learning;*
- *Academic Staff inability to critiques publications as basis for improving Research Outputs;*
- *Lack of regular maintenance and investment in Teaching and Research infrastructure;*
- *Academic, Administration, and Support-service areas not effectively integrated.*

Sources of Funding: - reference #1 to # 42

- *Collaboration with Further and other Higher Educational Institutions; Government Departments – including the QAA and HEFCE; and other local, regional, national and international Public Sector organisations;*
- *Partnerships with local, regional, national, and international Private Sector Organisations in support of Masters, Doctoral and Post-doctoral Programmes and Professorships in applied research.*

Resources and Partnerships Practice #3 – [QN = 13]

Resources and Partnerships Practice #3 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in the ACQUISITION, ALLOCATION, and UTILISATION of FUNDS in the specific areas of responsibility. Analysis of the responses to Question #13 in Questionnaire Part Two, revealed that although most respondents (76%) thought the Resources and Partnership Practice #3 is highly 'important', it is only 'moderately effective' in sustaining quality improvement, because not enough money is raised to support improvement efforts. This is an example of a 'Good Practice' that needs to be improved in terms of its 'effectiveness'. Majority of interviewees attributed this lack of 'effectiveness' in not getting enough money to lack of a strategic quality planning, and inability of some Quality Managers to establish how the money will be use.

ACQUISITION, ALLOCATION, UTILISATION OF FUNDS
[Resources and Partnership Practice #3, Questionnaire Part Two, Question #13, QN = 13]

Deanery, Heads of Department and Programme Leaders personally and actively involved in acquisition, allocation, and utilisation of funds to defined Budget Centres [Code: QN30].

In addition, the responses to Questions #5 and #6 under Questionnaire Part Three, show that most academics and administrators are still uncertain about the long-term

benefits of entering into commercial ventures, and are also not able to accurately predict the strategic directly of government funding policy. One UK expert said:

"Many managers tell you they need money, but are not able to link the money to any productive initiatives which bring about improvements in teaching and research. As a consequence they are not able to account for the money. Sometimes the moneys remain unused and have to be returned" (UK Interviewee #11)

The view expressed above, is confirmed by analysis of the documentary evidence of practices provided by respondents and interviewees which identified key areas of activities, which might be the root causes of Resources and Partnership Practice #3 being described as a 'good practice'. From Figure 4.7 we can see that:

***Acquisition of Funds:** - reference #1 to #42*

- *Justification of Strategic Quality Improvement Plans based on Institutional and Departmental priorities, and realistic achievable goals and objectives relating to Teaching and Research;*
- *Robust Defence of Long and Short-term Spending Plans relating to Teaching and Research; backed by realistic 3 – 5 year Cash Flow Forecasts.*

***Allocation of Funds:** - reference #1 to #42*

- *Rationalisation based on Teaching and Research priorities and Cost-Benefit Analysis;*
- *Implementation of an Open Bidding Process for Funds under explicit conditions – no hidden agenda.*

***Utilisation of Funds:** - reference #1 to #42*

- *Budget Centres comprising of Cost Units, Revenue Units, Profit Units working as a Team to ensure accountability – not a one man Budget Centre;*
- *Activity-based Costing is most appropriate for costing Teaching and Research Quality Improvement Activities for effective management of Teaching and Research Overheads.*

In summary, the overall 'weakness' in resource and partnership practices is confirmed by the fact that, although there is a positive linear relationship between the degree of 'importance' and the degree of 'effectiveness', it is only 'moderately' strong - the expectation for best practices is that, it should be 'very' strong. Figure 4.7 below, highlights the key Resources and Partnerships Practices, and other critical success factors; in order to make quality managers strategically aware of the complex nature of the issues involved in ensuring continuous flow of resources to sustain continuous teaching and research quality improvement in their institutions.

CREATING AND SUSTAINING SYNERGIES
[Resources & Partnership Practice #1, Questionnaire Part Two, Question #11, QN = 11]

Creating Synergies:

- *Even though there is recognition that funding and other teaching and research resources are scarce, only a hand-full of institutions have in place deliberate strategies for creating synergies;*
- *Synergy is equated to Cost-cutting measures rather than Efficiency of Resource Allocation – a strategic error of judgement.*

Sustaining Synergies:

- *Areas of synergies between teaching and research are not fully exploited; resulting in missed opportunities and spiralling costs of bureaucracy;*
- *Most academics and administrators lack the skill for effective management of interfaces between academic and administrative activities; teaching and research; and scholarship and research.*

Figure 4.7
Osseo-Asare's Framework for Effective Management of Resources and Partnerships for Academic Quality

ACQUISITION, ALLOCATION, UTILISATION OF FUNDS
[Resources and Partnership Practice #3, Questionnaire Part Two, Question #13, QN = 13]

Acquisition of Funds:

- *Justification of Strategic Quality Improvement Plans based on Institutional and Departmental priorities, and realistic achievable goals and objectives relating to Teaching and Research;*
- *Robust Defence of Long and Short-term Spending Plans relating to Teaching and Research; backed by realistic 3 – 5 year Cash Flow Forecasts.*

Allocation of Funds:

- *Rationalisation based on Teaching and Research priorities and Cost-Benefit Analysis;*
- *Implementation of an Open Bidding Process for Funds under explicit conditions.*

Utilisation of Funds:

- *Budget Centres comprising of Cost Units, Revenue Units, Profit Units working as a Team;*
- *Activity-based Costing is most appropriate for costing Teaching and Research Quality Improvement Activities for effective management of Teaching and Research Overheads.*

DIVERSIFICATION OF SOURCES OF FUNDING
[Resources and Partnership Practice #2, Questionnaire Part Two, Question #12, QN = 12]

Areas of Weakness Needing Funding:

- *Lack of skill and facilities for teaching students with disabilities;*
- *Inability to help students move from surface-learning to deep-learning;*
- *Academic Staff inability to critiques publications as basis for improving Research Outputs;*
- *Lack of regular maintenance and investment in Teaching and Research infrastructure;*
- *Academic, Administration, and Support-service areas not effectively integrated.*

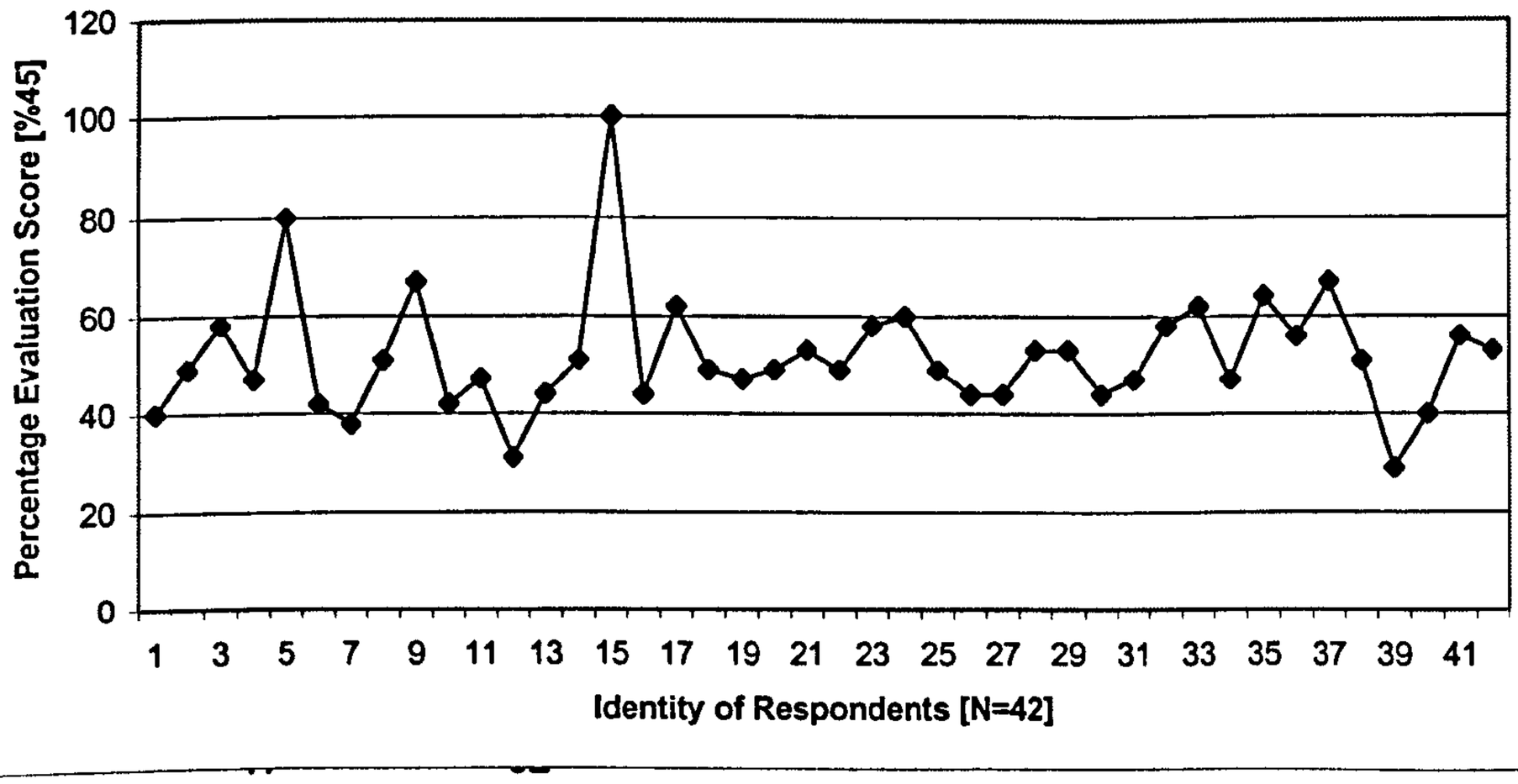
Sources of Funding:

- *Collaboration with Further and other Higher Educational Institutions; Government Departments – including the QAA and HEFCE; and other local, regional, national and international Public Sector organisations;*
- *Partnerships with local, regional, national, and international Private Sector Organisations in support of Masters, Doctoral and Post-doctoral Programmes and Professorships in applied research.*

E. Best Practices for Effective Process Management

According to the literature on TQM, continuous improvement of processes over a long period of time provides the basis for the more short-term radical change and improvement suggested by the philosophy of Business Process Re-engineering (BPR) (Zairi, 1997; Harrington, 1998). Research by Kanji and Tambi (1999) on critical success factors suggests that, US higher education institutions rank 'processes' second to 'leadership'; UK higher education institutions however rank 'leadership' second to 'processes' – this is confirmed by Osseo-Asare and Longbottom (2002). Graph 4.5 below, is a plot of the Evaluation Scores of 42 respondents for the three Processes Practices. It appears to mimic the erratic patterns shown by Graph 4.1; Graph 4.2; Graph 4.3; and Graph 4.4 above on practices relating to 'Leadership', 'Policy and Strategy', 'Staff Management', and 'Resources and Partnerships'. This empirical evidence of *similarities* suggests a strong *probabilistic* or *deterministic* causality between 'leadership', 'staff management', 'resources and partnerships', and 'processes' through 'policy and strategy'. If this indeed is the case, then it is suggestive of the fact that a weak policy and strategy will tend to weaken the relationship between the key enabler criteria and associated quality management practices, with serious implication for sustainability of an institution's quality improvement efforts.

Graph 4.5
Evaluation of Processes Practices in UK HEIs
(Source: Based on Questionnaire Part Two - Questions: 14, 15, 16)

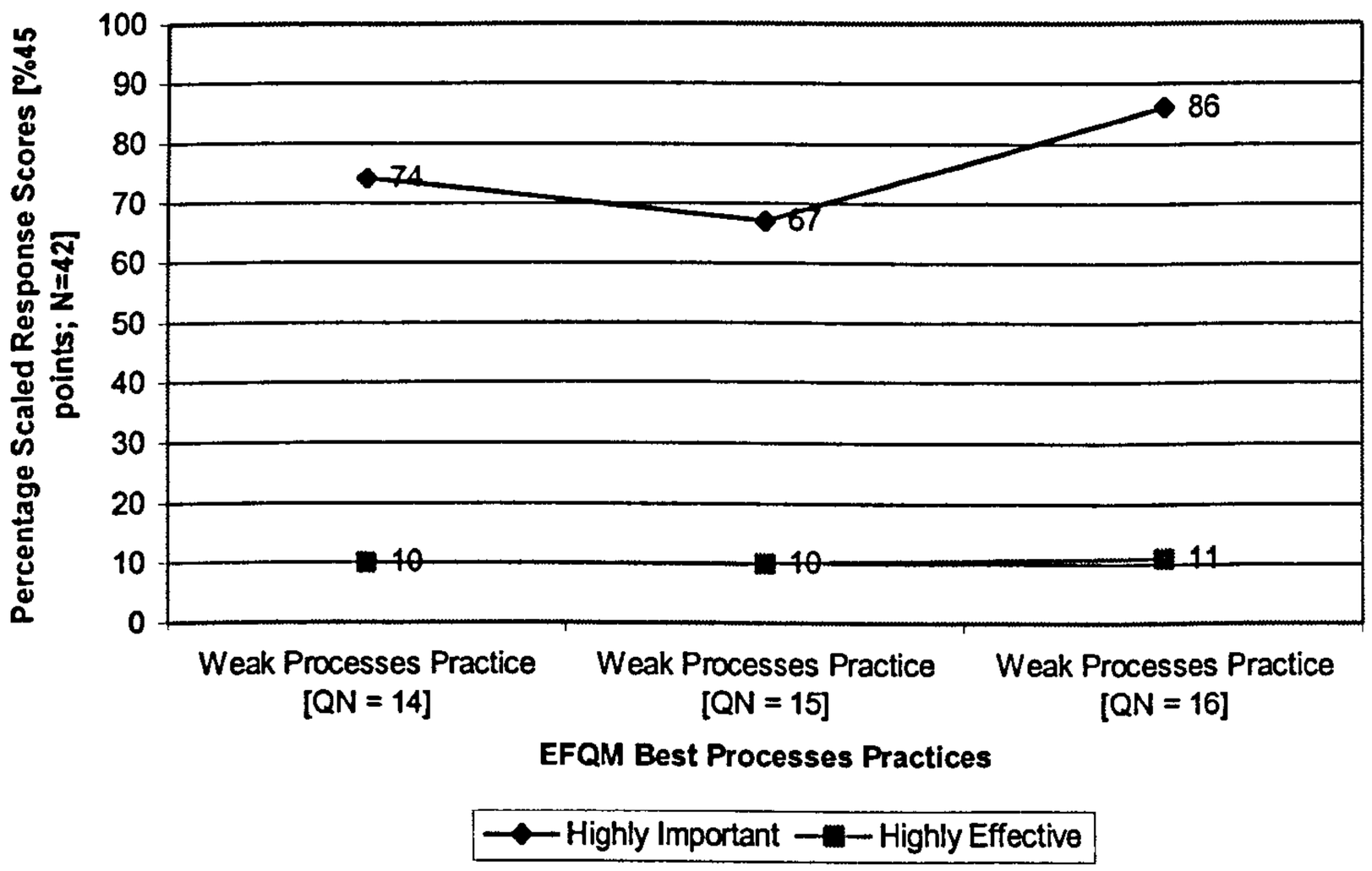


The overall results for the three Processes Practices revealed that, majority of respondents thought that all *three* practices were 'weak practices'. The evaluation results for these three practices are briefly summarised below from a pessimist's point of view:

- *Processes Practice #1 - QN = 14: - Described by majority of respondents (90%) as a WEAK PRACTICE;*
- *Processes Practice #2 - QN = 15: - Described by majority of respondents (90%) as a WEAK PRACTICE;*
- *Processes Practice #3 - QN = 16: - Described by many of respondents (89%) as a WEAK PRACTICE.*

The fact that the three process management practices on the whole represent 'weak' practices appears to contradict the test statistics. First, the t-calculated value of 15.6134 is greater than the t-critical of 2.0211, which suggests there is a linear relationship between the degree of 'importance' and the degree of 'effectiveness'. Second, the r-value is positive, suggesting that, the linear relationship is positive. Third, the magnitude of the r-value i.e. +0.927 also suggest that, the positive linear relationship is very strong, as one would expect for best practices. However, Chart 4.5 shows wide perception gaps between the degree of importance and the degree of effectiveness.

Chart 4.5
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Processes Practices
(Source: Based on Questionnaire Part Two - Questions: 14, 15, 16)



This apparent contradiction may be explained in three ways, first, the r^2-value of 0.859 tells us that about 86% of the variation in the degree of 'importance' is explained by variations in the degree of 'effectiveness' of practice. The 14% variation in the degree of 'importance' which remains unexplained might be the source of the contradiction. Second, the assumption that the degree of 'importance' and degree of 'effectiveness' represent classic examples of dependent and independent variable may be fundamental false. Third, perhaps the null hypothesis that there is no linear relationship ought to be accepted. It also suggest that the test statistics alone perhaps does not account for the perception gaps in the degree of 'importance' and degree of 'effectiveness', which supports the idea that a non-statistical or semi-statistical method of assessing the perception gaps is needed. This research study develops a semi-statistical method based on inductive analysis to deal with this problem. Chart 4.5 above, shows the 'perception gaps' or 'quality gaps' for all three practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Processes Practices.

Processes Practice #1 – [QN = 14]

Processes Practice #1 – [QN = 14] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in the MAINTENANCE of a FRAMEWORK of CORE PROCESSES, known to deliver superior students, government, institutional, and other stakeholders' results. The analysis of the responses to Question #14 in Questionnaire Part Two, suggests that, although majority of respondents (74%) thought that the practice of maintaining a framework of core processes is 'highly important' the implementation of the practice has been 'less effective' (see Table 4.6 below). This particular process management practice is therefore an example of a 'weak practice' in terms of being 'highly important' yet 'less effective' in delivering significant improvement in teaching and research quality.

Maintaining a Framework of Core Processes
[Processes Practice #1, Questionnaire Part Two, Question #14, QN = 14]

Chancellery, Deanery, Heads of Department, Quality Managers and Programme Leaders are personally and actively involved in the design of processes and in the creation and maintenance of a framework of core processes in order to achieve set quality improvement objectives and targets [Code: QN31].

The results show there is a lack of effective implementation of Processes Practice #1. This has led some to suggest that, claims of improvements in the quality of teaching and research as shown by improved Teaching Quality Assessment (TQA) and Research Assessment Exercise (RAE) Results, were a direct result of 'game-play' than the result of real process improvement. This view has also been expressed by at least two practitioners from pre-1992 and post-1992 UK higher education institutions.

"Even though the work of the QAA and HEFCE are good intended, they have become too politicised and bureaucratic. A department can score 24/24 without real evidence of teaching quality improvement. It is clear 'game-play' is evident –call it lobbying to boost final scores in order to attract more student"(UK Interviewee #7).

"We have leadership team committed to ownership and continuous improvement of teaching and research processes. An excellence feedback from Staff, Students, External Examiners is a measure of the extent to which our processes have improved. We always get 24/24 not because of game-play but because of real process improvement achieved over many years of investment of time and money"(UK Interviewee #2).

The views of the above two interviewees seem to suggest that, external stakeholders in particular the government through its agencies such as the QAA and HEFCE appear to want to go it alone when it comes to defining quality and developing an appropriate model for quality in higher education. This perhaps accounts in part for incidence of 'game-play' by individual higher education institution, in an attempt as it where to please the government in order to gain the level of funding they urgently need.

Table 4.6
Importance and Effectiveness Gaps for the Three Processes Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.6A – IMPORTANCE GAP

Processes Practices	Relative Importance Score	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 14]	74 ***	+4	-6
#2 – [QN = 15]	67 **	-3	-13
#3 – [QN = 16]	86 ****	+16	+6

Table 4.6B – EFFECTIVENESS GAP

Processes Practices	Relative Effectiveness Score	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 14]	10 *	-60	-70
#2 – [QN = 15]	10 *	-60	-70
#3 – [QN = 16]	11 *	-59	-69

Table 4.6A and 4.6B above also show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Resources and Partnership Practices. How these vital statistics impact on process management decisions for quality improvement will be examined in detail in the next chapter.

Even though majority of respondents Processes Practice #1 as a 'weak' practice, most UK interviewees acknowledge that 'best practices' exist in this area of 'processes'. This is what an expert in the UK said in the statement below:

"Even though we acknowledge the weaknesses inherent in the QAA Model, we have to give it some credit. The most important being that it has succeeded in focusing the minds of quality managers and leaders in higher education institutions on the criticality of process improvement in delivering student satisfaction"(UK Interviewee #16).

The view expressed by the above interviewee is confirmed by examination of the documentary evidence of practice. These documents revealed key activities - outlined below - linked to Processes Practice #1, which might not have been effectively implemented, even though they were regarded as being important. From Figure 4.8 on page 258 we can see that:

Identifying and Selecting Core Processes: *- reference #1 to #42*

- *Few people understood the nature of tasks and activities making up a process, mainly because processes are not well documented to allow ineffective processes to be redesigned;*

- *There is little or no systematic basis for identifying, evaluating and selecting tasks and activities with the required characteristic features to enhance process performance before key teaching and research processes are designed or redesigned.*

Maintaining the Framework of Core Processes: *- reference #1 to #42*

- *Difficulty holding the framework of core processes together for a long period, because of lack of regular monitoring of process performance, and feedback of results into the daily process control mechanism;*

- *Rising Staff Turnover means staff with the relevant skills for effective process management are not always going to be around to sustain initial process improvements achieved, without having to restart the improvement initiative all over again.*

Processes Practice #2 – [QN = 15]

Processes Practice #2 – as briefly described below - relates to the extent to which respondents are personally and actively involved in encouraging and sustaining PROCESS OWNERSHIP for continuous IMPROVEMENT in the quality of teaching and research. The analysis of the responses to Question #15 in Questionnaire Part

Two, suggests that, majority of respondents (90%) thought that the 'practice of process ownership' is a 'Weak Practice' in for not being 'effectively' implemented despite its 'importance' (see Table 4.6 above). The importance of 'process ownership' suggests a linkage between 'leadership' and 'processes'; and has made some to question whether or not the two enabler-criteria should not be integrated.

PROCESS OWNERSHIP FOR IMPROVEMENT

[Processes Practice #2, Questionnaire Part Two, Question #15, QN = 15]

Chancellery, Deanery, Heads of Departments, Quality Managers, Programme Leaders and Staff carrying out improvement activities are not very enthusiastic about personally and actively been accountable for specific processes to ensure process improvement objectives and targets are achieved [Code: QN32].

The analysis of the responses to Question #4 under Questionnaire Part Five revealed that a majority of respondents (60%) thought that 'leadership' and 'processes' are more effective when integrated into one factor, rather than managed separately. This view is eloquently expressed in the statement below, made by an interviewee in the UK:

"My reason for suggesting an integration of 'leadership' and 'processes' is that in my institutions it has helped to identify areas of synergy and encouraged process ownership for sustained improvement. In the past we placed too much emphasis on 'processes' than on 'leadership' following years of implementing QAA and HEFCE 'process-centred' Models" (UK Interviewee #8)

Some interviewees disagree with the above view arguing that, integration if not well managed has the potential of creating conflict of interest in a work environment. Most academics would like to protect their intellectual freedom by working with minimal interference. The documentary evidence of practices provided by respondents and interviewees confirms that although many respondents (67%) see Processes Practice #2 as 'highly important', some key activities relating to the practice – as outlined below - might not to have been effectively implemented. From Figure 4.8 we can see that:

Job Descriptions: - reference #1 to #42

- *Job Descriptions do not specifically assign particular task or activity to one individual but to a team, making it difficult to know who exactly is doing what in a group situation;*
- *Weak Team leadership, resulting in task not properly matched with individual abilities and skills.*

Recognition and Rewards: - reference #1 to #42

- *Lack of recognition for task well completed, because the link between 'task completion' and 'rewards' is only rhetorical – no such link has been established or is deemed necessary for a variety of reasons, of which budgetary constraints is the most popular;*

- *Staff Perception that, their immediate superior, examples: Team Leaders, Heads of Department or the Dean of School are simply not capable of rewarding them through pay rises, promotions or improving their working conditions.*

Processes Practice #3 – [QN = 16]

Processes Practice #3 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in the helping to SUSTAIN, CONTINUOUS PROCESS IMPROVEMENT in their specific areas of responsibility.

SUSTAINING CONTINUOUS PROCESS IMPROVEMENT
[Processes Practice #3, Questionnaire Part Two, Question #16, QN = 16]

Chancellery, Deanery, Heads of Department, Programme Leaders, and other staff personally and actively involved in ensuring continuous supply of financial and non-financial resources in order to sustain Process Improvement [Code: QN33].

Analysis of the responses to Question #16 in Questionnaire Part Two, suggests that, majority of respondents (86%) thought the practice of sustaining continuous process involvement' was 'highly important'. However, it was not 'effectively' implemented in order to achieve expected quality improvement in teaching and in research; and therefore an example of 'Weak Practice', which may have to be abandoned or improved upon.

Majority of interviewees attributed the 'weakness' in Processes Practice #3 to the lack of leadership commitment to maintain regular supply of input resources to help sustain process improvement. One UK expert said:

"To be fair to chancellors, deans and heads of departments, I think their lack of commitment to maintain regular supply of input resources stems from the fact that in many instances the resources are simply not available. Scarce resources have to be optimised, which means they are not able to make funds available to all quality improvement initiative" (UK Interviewee #11)

Majority of interviewees - including the one above - believe that lack of resources epitomes an institution in crisis, requiring transformational leadership. This need for strong leadership is confirmed by the analysis of the responses to Question #5 under Questionnaire Part Five, which suggests that a 'leadership' based on formal rigid hierarchical structures for quality management in higher education is required. Others however suggest a 'leadership' based on less formal flexible structures, that responds

quickly to changes in the external environments. The documentary evidence of practices provided by respondents and interviewees identifies key activities, which might be the root causes of Processes Practice #3 being described as a 'weak practice'. From Figure 4.8 we can see that:

Continuity of Improvements: *- reference #1 to #42*

- *Frequent restructuring resulting in frequent changes in Leadership and Policy and Strategy at all levels of the management;*
- *Wrong timing of decisions to discontinue a Programme or an improvement initiative because of continuous lose of teaching and research revenue.*

Sustainability of Continuity: *- reference #1 to #42*

- *Lack of Commitment from the Chancellery, Deanery, and Heads of Departments to Continuous Funding of Programmes or improvement initiatives, through regular maintenance and increased investment in teaching and research infrastructure;*
- *Rising Budgetary Deficits due to mismanagement of budgetary allocations. This has resulted in departments having idle cash and no viable projects to spend on, and others with viable projects with no cash – either because the mechanism for effecting cash transfers is triggered at the beginning of a new financial year; or the deans and heads of two departments do not see eye to eye, resulting in delayed in getting the transfer off the ground.*

In summary, the overall 'weakness' in process management practices identified by differences in the perception gaps appears to contradict the test statistics which suggest there is a strong linear relationship between the degree of importance and the degree of effectiveness. This apparent contradiction has been explained in terms of the fact that:

- *14% of the variation in the degree of importance is not explained by the predictive model;*
- *The degree of importance and degree of effectiveness perhaps do not represent dependent-independent variables;*
- *The assumption of linearity i.e. strong positive correlation between degree of importance and the degree of effectiveness is fundamentally false.*

Figure 4.8 below provides a framework for effective management of core teaching and research processes. It represents an attempt to bring together all the key process management practices and CSFs under a single framework. It is hoped that, this will encourage both academics and practitioners to become strategically aware of the need to improve core processes, which are known to deliver superior levels of satisfaction and delight for students, the government, potential employers, the higher education institution itself, and other internal and external stakeholders.

MAINTAINING A FRAMEWORK OF CORE PROCESSES
[Processes Practice #1, Questionnaire Part Two, Question #14, QN = 14]

Identifying and Selecting Core Processes:

- *Few people understood the nature of tasks and activities making up a process, mainly because processes are not well documented to allow ineffective processes to be redesigned;*
- *There is little or no systematic basis for identifying, evaluating and selecting tasks and activities with the required characteristic features to enhance process performance before key teaching and research processes are designed or redesigned.*

Maintaining the Framework of Core Processes:

- *Difficulty holding the framework of core processes together for a long period, because of lack of regular monitoring of process performance, and feedback of results into the daily process control mechanism;*
- *Rising Staff Turnover means staff with the relevant skills for effective process management are not always going to be around to sustain initial process improvements achieved, without having to restart the improvement initiative all over again.*

Figure 4.8
Osseo-Asare's Framework for Effective Process Management for Academic Quality

PROCESS OWNERSHIP FOR IMPROVEMENT
[Processes Practice #2, Questionnaire Part Two, Question #15, QN = 15]

Job Descriptions:

- *Job Descriptions do not specifically assign particular task or activity to one individual but to a team, making it difficult to know who exactly is doing what in a group situation;*
- *Weak Team leadership, resulting in task not properly matched with individual abilities and skills.*

Recognition and Rewards:

- *Lack of recognition for task well completed, because the link between 'task completion' and 'rewards' is only rhetorical – no such link has been established or is deemed necessary for a variety of reasons, of which budgetary constraints is the most popular;*
- *Staff Perception that, their immediate superior, examples: Team Leaders, Heads of Department or the Dean of School are simply not capable of rewarding them through pay rises, promotions or improving their working conditions.*

SUSTAINING CONTINUOUS PROCESS IMPROVEMENT
[Processes Practice #3, Questionnaire Part Two, Question #16, QN = 16]

Continuity of Improvements:

- *Frequent restructuring resulting in frequent changes in Leadership and Policy and Strategy at all levels of the management;*
- *Wrong timing of decisions to discontinue a Programme or an improvement initiative because of continuous lose of teaching and research revenue.*

Sustainability of Continuity:

- *Lack of Commitment from the Chancellery, Deanery, and Heads of Departments to Continuous Funding of Programmes or improvement initiatives, through regular maintenance and increased investment in teaching and research infrastructure;*
- *Rising Budgetary Deficits due to mismanagement of budgetary allocations; resulting in departments having idle cash and no viable projects to spend on, and others with viable projects with no cash.*

Summary of the Conceptual Frameworks for Effective Management of 'Autonomy' Criteria

Section [4.1] discussed the empirical results by focussing on the association between:

- *40 out of 64 critical success factors in the Pool of CSFs under Appendix C3;*
- *Weak, Good, and Best Practices in the Pool of Practices in Appendix C4;*
- *CSFs and Best Practices i.e. between Appendices C3 and C4;*
- *The degree of 'importance' and the degree of 'effectiveness' of each of the 28 quality management practices in Questionnaire Part Two.*

The identification of associations between CSFs and best practices led to:

- *The development of the Osseo-Asare Scoring Mechanism as an alternative to the EFQM and Kanji's Scoring Mechanisms; which provides an explicit definition of weak, good, best, and excellent practices in terms of the relative importance and relative effectiveness of a quality management practice.*
- *The introduction of the notion of Best Practice Gaps (BPGs) as a strategic decision-making concept for measuring perception gaps in terms of relative importance and relative effectiveness, and for generating alternative strategies for closing perception gaps - this is explained in detail under Chapter Five.*
- *The development of 'five' frameworks for effective management of the following five 'enabler' criteria: (1) leadership; (2) policy and strategy; (3) staff management; (4) resources and partnership; and (5) processes. Each framework comprises of secondary CSFs and the best practices associated with them.*
- *The five 'enabler' criteria being re-categorised as 'autonomy' criteria because they were found to be synonymous with institutional ability to sustain autonomy and intellectual freedom.*

The above developments suggest that, it is possible and feasible to develop an approach to quality improvement based on a systematic transformation of 'weak' practices to 'good', 'best', and 'excellent' practices by improving on the degrees of 'importance' and 'effectiveness' of practices. Finally, even though overall the test statistics suggest there a linear relationship between the degrees of 'importance' and 'effectiveness' of the enabler practices what remains uncertain is whether or not the relationship is linear or curvilinear. Further research of a quantitative nature would be required to establish the exact nature of the relationship. For instance the t statistics for leadership practices suggest there is no linear relationship even though the perception gap is very narrow and the product-moment coefficient (r) is positive. Section [4.2] examines the 'results' criteria.

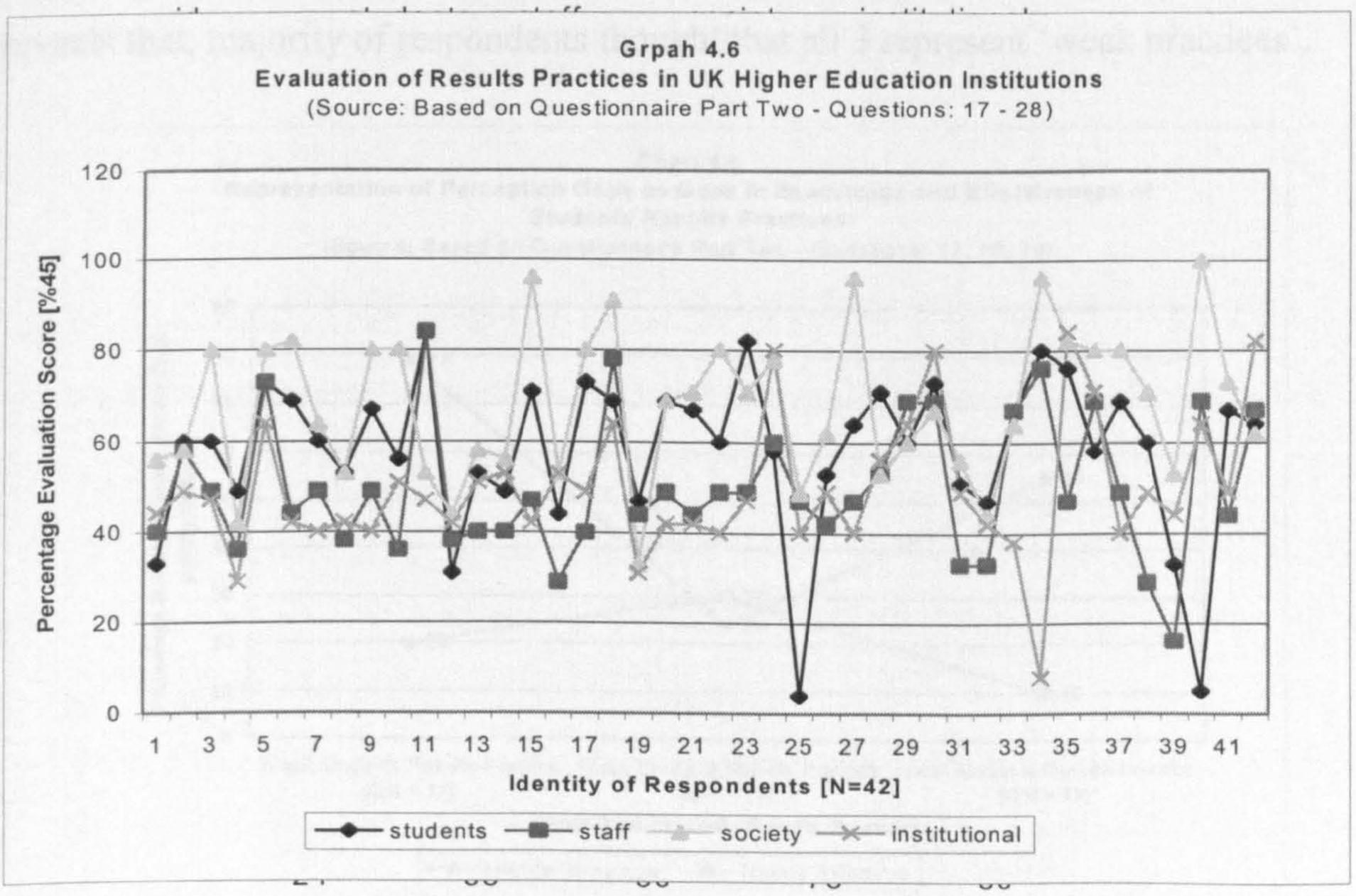
4.2

Creating Conceptual Frameworks for Effective Management of 'Accountability' Criteria

"In a higher education system that cater for mass participation, prospective students, parents and employers all need clear information about courses and qualifications...Institutions also need to have a clear understanding of the criteria against which they will be judged in reviews." (QAA, 2001:5)

This section covers the four 'results' criteria: (1) customers or students; (2) people or staff; (3) society; and (4) institutional performance results. The five 'enabler' criteria have already been dealt with under Section [4.1]. Kanji and Tambi (1999) saw the increased customer focus in UK higher education institutions as a move closer to implementation of Total Quality Management (TQM) principles. However, others including Morley (2001) saw it as evidence of government regulation through increased inspection-based external quality assessment. Graph 4.6 below presents, the total scores for 12 practices relating to the four 'results' criteria.

Grpah 4.6
Evaluation of Results Practices in UK Higher Education Institutions
(Source: Based on Questionnaire Part Two - Questions: 17 - 28)



4.2.1. Best Practices for Sustaining Stakeholders' Results

The interesting similarity between the plots in Graph 4.6 and those of the five 'enabler' criteria is that they all exhibit the same erratic behaviour, which suggests a number of things: first, it probably confirms the causal relationship between 'enablers' and 'results'. Second, it confirms the appropriateness of treating students, staff, society, and the institution itself as key stakeholders. Third, the fact that the erratic pattern in Graph 4.6 is almost synchronised, places emphasis on the importance of seeking to know and meet the needs and expectations of stakeholders as explained below.

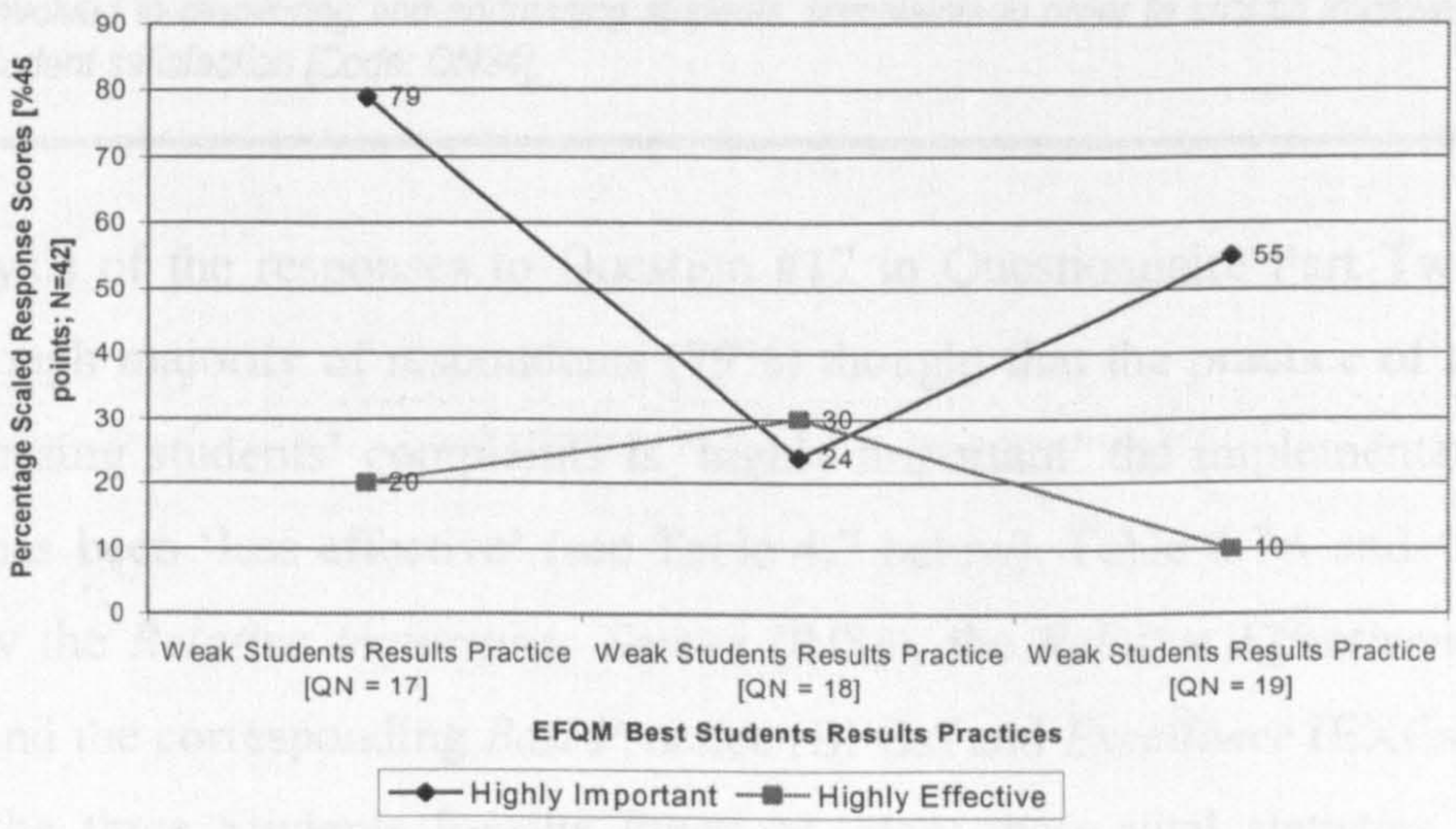
A. Best Practices for Effective Management of Students Results

The power of students as customers has risen since the 1980s following expansion in student population in line with the Government's agenda of widening participation (DfES, 2003). This however, has serious consequence for sustaining the quality of teaching and research - a point eloquently put cross by a UK interviewee in the statement below:

"One of the direct consequences of expansion in student numbers is the fall in staff-student ratios from just over 1:10 in 1983 to about 1.20 in 2002. These days, students are writing fewer assignments and are having fewer face-to-face contacts with their lecturers and supervisors. There is no doubt in my mind that this has serious implication on students learning processes – deep and surface learning processes - and therefore institutional efforts to sustain quality improvement (UK Interviewee #4).

Chart 4.6 below shows the overall results for the 3 Students Results Practices, which reveals that, majority of respondents thought that all 3 represent 'weak practices'.

Chart 4.6
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Students Results Practices
(Source: Based on Questionnaire Part Two - Questions: 17, 18, 19)



The evaluation results for the three Students Results Practices are briefly summarised below from a pessimist's point of view:

- *Students Results Practice #1 - QN = 17: - Described by majority of respondents (80%) as a WEAK PRACTICE;*
- *Students Results Practice #2 - QN = 18: - Described by most respondents (70%) as a WEAK PRACTICE;*
- *Students' Results Practice #3 - QN = 19: - Described by majority of respondents (90%) as a WEAK PRACTICE.*

The fact that the three students' results practices on the whole represent 'weak' practices is confirmed by test statistics, which show an inverse linear relationship between the degree of 'importance' and the degree of 'effectiveness' of students' results practices. The expectation is for a strong positive linear relationship between 'importance' and 'effectiveness'; instead we have a t-calculated value of 4.2979 and r-value of - 0.562 indicating a moderately strong negative linear relationship.

Chart 4.6 above, shows the 'perception gaps' or 'quality gaps' for all three practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Students Results Practices.

Students Results Practice #1 – [QN = 17]

Processes Practice #1 – [QN = 17] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in the MONITORING and ADDRESSING STUDENTS' COMPLAINTS.

MONITORING AND ADDRESSING STUDENTS' COMPLIANTS

[Students Results Practice #1, Questionnaire Part Two, Question #17, QN = 17]

Chancellery, Deanery, Heads of Department, Quality Managers and Programme Leaders are personally and actively involved in monitoring and addressing students' complaints in order to sustain improvement in the level of student satisfaction [Code: QN34].

The analysis of the responses to Question #17 in Questionnaire Part Two suggests that, although majority of respondents (79%) thought that the practice of monitoring and addressing students' complaints is 'highly important' the implementation of the practice has been 'less effective' (see Table 4.7 below). Table 4.7A and 4.7B below also show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Students Results Practices. How these vital statistics impact on

process management decisions for quality improvement will be examined in detail in the next chapter.

Table 4.7
Importance and Effectiveness Gaps for the Three Students Results Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.7A – IMPORTANCE GAP

Students Results	**Relative Importance Score**	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 17]	79 ***	+9	-1
#2 – [QN = 18]	24 *	-46	-56
#3 – [QN = 19]	55 **	-15	-25

Table 4.7B – EFFECTIVENESS GAP

Students Results	**Relative Effectiveness Score**	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 17]	20 *	-50	-60
#2 – [QN = 18]	30 *	-40	-50
#3 – [QN = 19]	10 *	-60	-70

The recognition that managing customer complaints is highly important for achieving students satisfaction, retention and loyalty is confirmed by Zairi (2000a:331) who stated that:

"Managing quality and customer complaints are essential for achieving customer satisfaction, retention and loyalty. Organisations need to develop a culture for excellence which encourages continuous improvement of quality and is not averse to handling customer complaints" (Zairi, 2000a:331)

Students Results Practice #1 is therefore an example of a 'Weak Practice' in terms of being 'highly important' yet 'less effective' in delivering continuous improvement of teaching and research quality. Inductive analysis of the interview transcripts suggests that, majority of interviewees in the UK and USA agreed 'students' are 'customers' in higher education. This is not simply in terms of students being 'consumers' of services or 'ability to pay for the services, but also in terms of a specific system of interest, which relates to how institutions meet their short-term financial obligations. This is what a UK interviewee said:

"We need cash to meet our short-term obligations, which includes bills, and paying contract lecturers. Everyone knows that 'overseas' or international students pay more and usual do so prior to commencement of their studies. Home students who are sponsored by reputable organisations also pay promptly – even though the fees are lower compared with those of overseas students. Our finance department does not release moneys it does not have. Financial certainty is critical in this business of higher education, without which all our dreams of continuous improvement falls apart. We therefore focus more on meeting the needs and expectations of students who have paid the full fees prior to enrolment followed by those with a high probability of paying (UK Interviewee #8)

Even though the works of Kanji and Tambi (1999, 2002) correctly suggested that there is now increased customer focus in UK higher education institutions, the empirical evidence provided by this doctoral research study suggest that quality management practices for handling students complaints, appeals and offences have not been effectively implemented. Table 4.7 shows the perception gaps resulting from gaps in relative importance and effectiveness for Students Results Practice #1, #2, and #3, as discussed in this sub-section. Even though majority of respondents (80%) thought Students Results Practice #1 is an example of a 'weak' practice, most UK interviewees acknowledge that 'best practices' exist in this area of 'customer results'. This is what an expert in the UK said in the statement below:

"Many UK institutions now have in place clear regulations for handling students complaints, including appeals, and offences – currently available on web-sites and on CD-ROMS for students. It is now a question of how effectively these regulations are applied to test cases "(UK Interviewee #6).

An examination of the documentary evidence provided by respondents identified possible areas of teaching and research activities, which might not have been effectively implemented, even though they were regarded as being highly important. From Figure 4.9 on page 269 we can see that:

***Regulations and Procedures:** - reference #1 to #42*

- *Regulations in some institutions are not clear enough for most undergraduate students in this era of widening participation;*

- *Regulations not varied to meet the need of the diverse student population. To do this effectively requires input from Teaching and Research Staff, Administrative and Support-service Staff, and representative of Students' Unions.*

***Complaints, Appeals and Offences:** - reference #1 to #42*

- *Complaints procedures not harmonised, too bureaucratic, and restricted to lower level managers and leaders who are not key decision-makers in their departments, school or institutions;*

- *Pastoral Care Systems not dealing effectively with areas students are most interested in, such as: students finances, staff-students relationships, health and safety, socialisation – including anxieties and fears of students in particular the young, disabled, from overseas, with language difficulties;*

- *Mismanagement of serious academic offences and appeals relating to examinations and assignments results, and research supervision at undergraduate and post-graduate levels.*

Students Results Practice #2 – [QN = 18]

Students Results Practice #2 – as briefly described below - relates to the extent to which respondents are personally and actively involved in encouraging and sustaining students SATISFACTION and DELIGHT with the quality of teaching and research.

The analysis of the responses to Question #18 in Questionnaire Part Two, suggests that, many respondents (70%) thought that Students Results Practice #2 is a 'Weak Practice' for not being 'effectively' implemented; partly because most institutions pay 'lip-service' to the notion of satisfying and delighting students on a 'continuous' basis.

STUDENTS' SATISFACTION AND DELIGHT

[Students' Results Practice #2, Questionnaire Part Two, Question #18, QN = 18]

Chancellery, Deanery, Heads of Departments, Quality Managers, Programme Leaders and Staff carrying out improvement activities are not very enthusiastic about personally and actively satisfying and delighting students [Code: QN35].

What is even more interesting is that, to some academics the idea of 'delighting' students is a foreign notion. This is how two interviewees forcefully put it:

"In my days students have to work very had to get a First Class or an 'A' Grade for their Assignments. Today, you only need to establish a rapport with your tutor, always put up a good smile, and even when you do not deserve it, it is forced upon you. Say this loud and many Post-1992 in particular will disagree, but I know it is there you can almost taste it – this is my personal view based on my personal observations" (UK Interviewee #4)

"What do these undergraduate students know about their subjects? We are supposed to be the experts, and our job is to teach them. My teaching style is different for post-graduates on a Masters Programme or Taught Doctoral Programmes. We have to be clear here, you need to assess the needs and expectations of students before you teach them" (UK Interviewee #7)

From the above statements, there appears to be a strategic error of judgement on the part of most respondents, because from a strategic marketing perspective where students are defined as 'customers', meeting their needs and exceeding their expectations become is critical to long-term institutional success (Zairi, 2000a; Thompson, 2003). The works of Kanji and Tambi (1999; 2002:43) suggest that, this apparent strategic error of judgement appears rooted in misconceptions about the meaning of 'delighting students'. Citing the work of Kotler and Armstrong (1996) they suggested that if a product or service performance exceeds customer expectations, the customer is 'highly' satisfied or delighted. Students delight therefore means satisfying students over and above their expectations – it is 'emotional affinity' which goes beyond 'rational preference' for a product or service. This is what Professor Gopal Kanji and Dr. Abdul Malek bin A. Tambi said in their book titled *Business Excellence in Higher Education:*

"Delighting the customer [student] means being best at what matters to customers [students], and this changes over time. A customer [student] might experience various degrees of satisfaction. If a product's performance matches expectations, the customer [student] is satisfied. If performance exceeds expectation, the customer [student] is highly satisfied or delighted...Customer [student] delight creates an emotional affinity for a product or service, not just rational preference, and ultimately enhances customer [student] loyalty" (Kanji and Tambi, 2002:43)

The documentary evidence of practices provided by respondents and interviewees confirms that, some key activities relating to Students Results Practice #2 might not to have been recognised as 'important' and therefore not 'effectively' implemented. These activities and examples of weak, good, and best practices are presented in Figure 4.9 and briefly listed below:

Satisfaction Surveys: *- reference #1 to #42*

- *Results from Students Satisfaction Surveys were not incorporated into improvement policy and strategy on timely basis, resulting in missed opportunities to address the situation;*
- *Inability of managers and leaders to prioritise the needs and expectations of students, because of budgetary constraints.*

Delight Surveys: *- reference #1 to #42*

- *With increasing demand for university places, most institutions are now only in the business of matching teaching and research performance to students expectations, thereby satisfying them and not to delight them by exceeding their expectations – which to most is not cost-effective in an excess- demand situation;*
- *Financially stable institutions in particular the pre-1992 group and some post-1992 institutions recognise the strategic importance of strengthening the link between Student Delight and Student Loyalty – in their effort to increase student retention rates and attract students who can pay for their high quality educational services and products.*

Students Results Practice #3 – [QN = 19]

Students Results Practice #3 – as briefly described in the 'box' below - relates to the extent to which respondents as academic quality managers and leaders - are personally and actively involved in INCORPORATING student's FEEDBACK into future Teaching and Research Quality IMPROVEMENT activities in their specific areas of responsibility.

INCORPORATING STUDENTS' RESULTS INTO IMPROVEMENTS

[Students Results Practice #3, Questionnaire Part Two, Question #19, QN = 19]

Chancellery, Deanery, Heads of Department, Programme Leaders, and other staff personally and actively involved in ensuring that students' feedback are incorporated into future quality improvement policies and strategies in order to reduce levels of students complaints [Code: QN36].

Analysis of the responses to Question #19 in Questionnaire Part Two, suggests that even though majority of respondents (90%) thought Students Results Practice #3 was not 'effectively' implemented; and therefore qualifies as a 'Weak Practice', which may have to be abandoned or improved upon. Majority of interviewees attributed this 'weakness' in Students Results Practice #3, to the lack of leadership commitment to ensuring that the students' complaints are reduced. Some interviewees think this weakness stems from a fundamental misconception about the extent to which students should be satisfied and delighted. One UK expert argued that:

"Personally, I do not think we ought to stretch this concept of students as 'customers' too far than we need to. If stretched too far there is the danger of undermining the Mission of Higher Education – particularly at the undergraduate level. Yes we want students to tell use what they want, but in a way that we do not undermine students' ability to think independently and our knowledge of our subject. We ought to encourage a healthy exchange of ideas. I agree that for a class of surface learners the task is difficult – deep learners always have one or two things to teach their teachers" (UK Interviewee #2)

The above statement appears to suggest, that, perhaps the best approach to dealing with students as customers is to develop a strategy, which encourages students to participate in the teaching and learning quality improvement process. Their involvement will help students effectively articulate their needs and expectation, and will provide quality manager with accurate feedback for improvement policy and strategy formulation, implementation and control.

Analysis of the responses to Question #4 under Questionnaire Part Four revealed that, about 52% respondents, said Entry Standards for their institution is 'DECLINING'. This appears to suggest that, a considerable number of 'surface learners' are entering institutions of higher learning as a result of the New Labour Government's Agenda for Widening Participation. This view is confirmed in the following statement from an interviewee in the UK:

"The pursuit of widening participation has led to decline in Entry Standards, in some departments. It is interesting to note that these 'DECLINE' are common in departments teaching 'micky-mouse' subjects' and have low QAA and RAE Scores, where standards have been lowered deliberately in order to obtained targeted number of students. In contrast, where Entry Standards have been maintained and improved strong academic leadership was required to ensure that rules were not bent in favour of students with lower Entry Standards, because it tended to create more problems than it solves" (UK Interviewee #4).

The above interviewee also appears to suggest that, there is a linkage between 'widening participation' and 'entry standards'. In some instances the relationship appears to be negative or inverse in the sense that, increase in the rate of participation

appears to lead to decline in entry standards. The statement also suggests that, whether or not the relationship is 'negative' or 'positive' is dependent on the individual institution's management and leadership. The documentary evidence of practices collected during this research study helped to identify key quality management activities, which might be the root causes of Students Results Practice #3 being described as a 'weak practice'. These are presented in Figure 4.9 and briefly outlined below as follows:

***Feedback Methodologies:** - reference #1 to #42*

- *Questionnaire not well designed to capture the real needs and expectations of Students. This is more for External Reporting Purposes;*
- *Some institutions take advantage of the fact that some students - in particular students with disabilities and overseas students with language difficulties - are not able to effectively articulate their needs and expectations.*
- *Few institutions combine the use of Questionnaires with Focus Groups of Students and Tutors; and Questionnaire Questions are mainly Quantitative, with very few open-ended questions.*

***Improvement Policy and Strategy Formulation:** - reference #1 to #42*

- *Policy and Strategy Reviews are rarely on time for implementation, because of confusion over how to integrate intended strategy with emergent strategy – in particular when there are uncertainties about Teaching and Research funding allocations;*
- *Policy and Strategy Reviews were on time but the need for restructuring changes means Policy Deployment is put on a hold, until everyone in position within the new or emerging institutional structure. The time-lag this creates results in proposed policy and strategy either forgotten or the initiator has left the institution – this calls for a restart since documentary evidence simply disappeared.*

In summary, the evidence of a negative linear relationship between the degree of 'importance' and the degree of 'effectiveness' of students results practices seem to offer some explanation for these practices being 'weak'. This is confirmed by the wide perception gaps. Figure 4.9 below presents a framework for effective management of students' results. It is an attempt to bring together all the key academic and non-academic quality management practices. These are then linked to secondary or subsidiary critical success factors (CSFs) under a single framework to facilitate understanding of the critical issues involved, and encourage both academics and practitioners to become strategically aware of the needs and expectations of students and other customers in higher education. This is the 'first' of four conceptual frameworks under the 'results' criteria, which form the basis for creating a theory for sustaining quality improvement and development of an appropriate academic quality model.

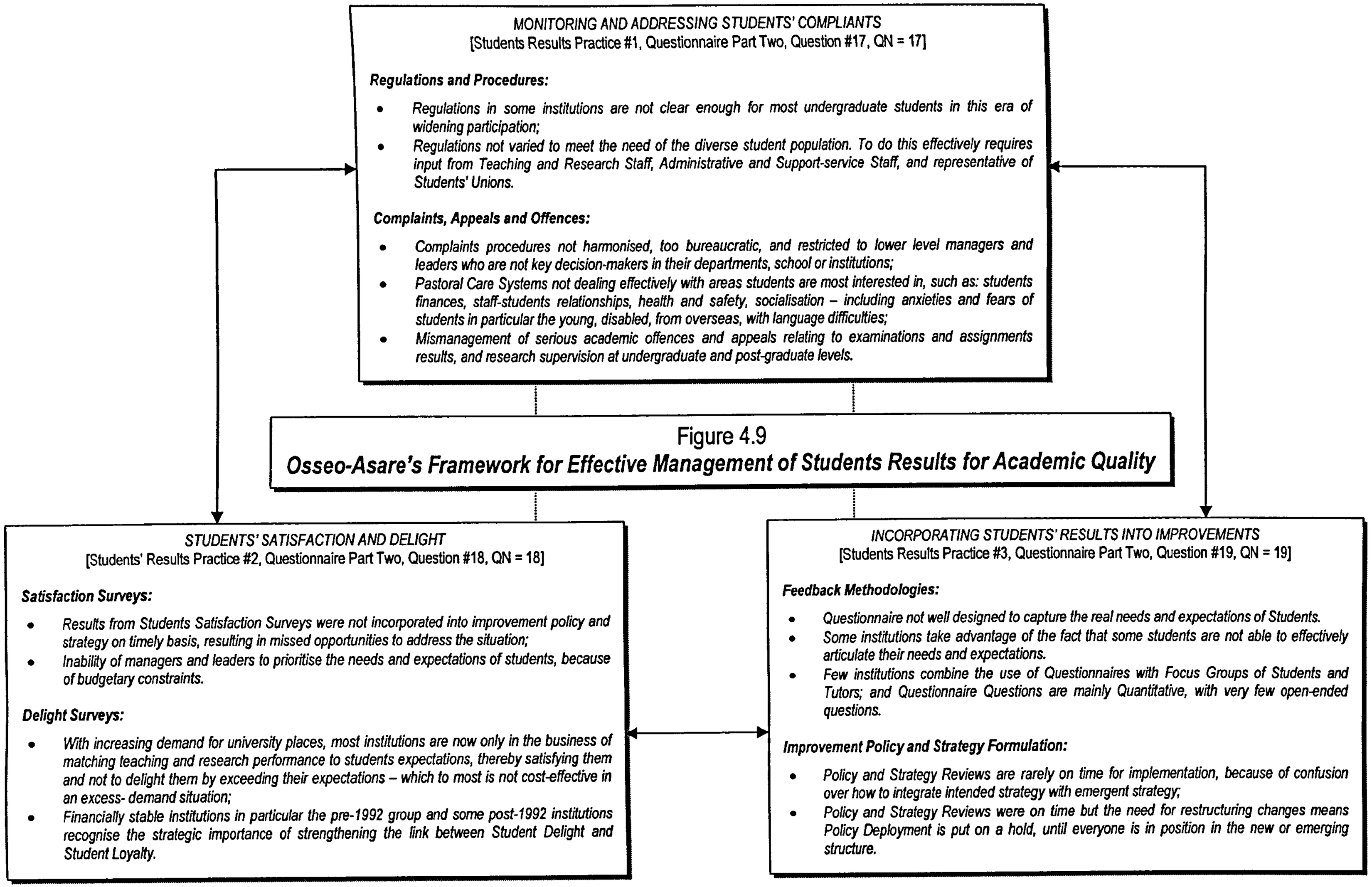


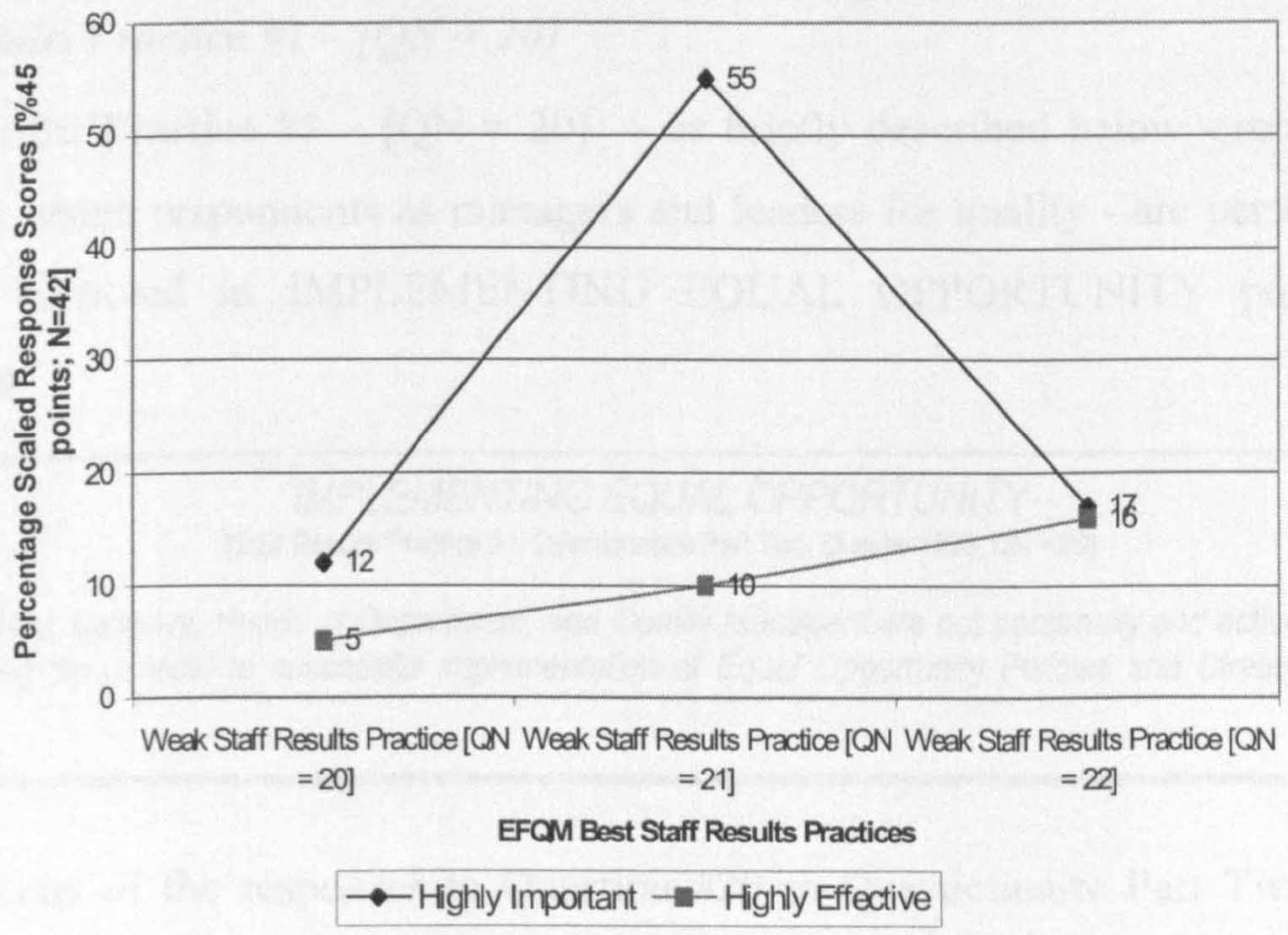
Figure 4.9
Osseo-Asare's Framework for Effective Management of Students Results for Academic Quality

B. Best Practices for Effective Management of Staff Results

The literature clearly suggest that the direct involvement of staff in quality issues and how these issues relate to their own jobs is very critical to efforts to sustain quality improvement in any organisation including higher education institutions (Marchington et al. 1993; Dale, 1999; Zairi, 2000a; Kanji and Tambi, 2002; Oakland, 2003). The philosophy of TQM encourages participation of all staff in the improvement process in an almost 'religious' fashion – which some academics do not find comfortable (Oakland, 2003). There is however, a generally accepted view put forward by Pfeffer (1994), Marchington and Wilkinson (1996) and later Godfrey and Wilkinson (1998) that, academic and non-academic staff ought not to be treated as a variable cost. They argued that staff ought to be viewed as a critical resource in the long-term viability and success of a higher education institution.

Chart 4.7 below shows the overall results for three Staff Results Practices, which reveals that, majority of respondents considered all *three* Staff Results Practices as representing 'weak practices'.

Chart 4.7
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Staff Results Practices
(Source: Based on Questionnaire Part Two - Questions: 20, 21, 22)



The evaluation results for the three Staff Results Practices are briefly summarised below from a pessimist's point of view:

- *Staff Results Practice #1 - QN = 20: - Described by majority of respondents (95%) as a WEAK PRACTICE;*
- *Staff Results Practice #2 - QN = 21: - Described by most respondents (90%) as a WEAK PRACTICE;*
- *Staff Results Practice #3 - QN = 22: - Described by majority of respondents (84%) as a WEAK PRACTICE.*

The fact that the three staff results practices on the whole represent 'weak' practices is confirmed by the test statistics, which show t-calculated of 0.3420 is less than the t-critical of 2.0211. This suggests that, there is no linear relationship between the degree of 'importance' and the degree of 'effectiveness' of the practices. This is confirmed by the near zero r-value of +0.054. Staff results 'best' practices are expected to have a strong positive linear relationship between 'importance' and 'effectiveness' which unfortunately was not the case with respect to staff results practices in participating UK higher education institutions.

Chart 4.7 above, shows the 'perception gaps' or 'quality gaps' for all three Staff Results Practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Staff Results Practices.

Staff Results Practice #1 – [QN = 20]

Staff Results Practice #1 – [QN = 20] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in IMPLEMENTING EQUAL OPPORTUNITY policies and strategies.

IMPLEMENTING EQUAL OPPORTUNITY

[Staff Results Practice #1, Questionnaire Part Two, Question #20, QN = 20]

Chancellery, Deanery, Heads of Department, and Quality Managers are not personally and actively involved but paying 'lip-service' to successful implementation of Equal Opportunity Policies and Strategies [Code: QN37].

The analysis of the responses to Question #20 in Questionnaire Part Two suggests that, very few respondents (12%) thought the practice of implementing equal opportunity policy and strategy' is 'highly important'. They also thought that, the implementation of the practice has been 'less effective'. This was because the practice

has not been seen as critical to delivering quality improvement; the practice was therefore seen as an example of a 'Weak Practice' in terms of being 'less important' and 'less effective' in delivering quality improvement.

Inductive analysis of the interview transcripts suggests that, majority of interviewees in the UK and USA agree that 'equal opportunity' practices are important but the link with issues of diversity has complicated the process of implementation. This has led to 'lip-service' being paid to successful implementation. Two interviewees in the UK and US said:

"We need to make staff feel they are not discriminated against on the basis of their race or colour. I must admit, in many cases these have been difficult to implement and have resulted in high staff turnover for ethnic minorities who feel they have to do twice as much to get the same results as their White and English counterparts. We hope to improve in this area – but strong leadership is required (UK interviewee #14)

"Yes we are serious about issues of diversity of which equal opportunity practices is a fundamental part. It is the only way forward in an attempt to incorporate the views and talents of people from all backgrounds in a multi-racial society. This is consistent with our Mission Objectives and I intend to pursue it vigorously (US Interviewee #7)

Table 4.8 below shows the 'perception gaps' resulting from gaps in relative importance and effectiveness for Staff Results Practice #1, #2, and #3, as discussed in this sub-section. Table 4.8A and 4.8B respectively show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Students Results Practices. How these vital statistics impact on staff performance result management decisions for quality improvement will be examined in detail in the next chapter.

Table 4.8
Importance and Effectiveness Gaps for the Three Staff Results Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.8A – IMPORTANCE GAP

Staff Results	**Relative Importance Score**	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 20]	12 *	-58	-68
#2 – [QN = 21]	55 **	-15	-25
#3 – [QN = 22]	17 *	-53	-63

Table 4.8B – EFFECTIVENESS GAP

Staff Results	**Relative Effectiveness Score**	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 20]	5 *	-65	-75
#2 – [QN = 21]	10 *	-60	-70
#3 – [QN = 22]	16 *	-54	-64

Even though majority of respondents (95%) thought Staff Results Practice #1 is an example of a 'weak' practice, some UK interviewees acknowledge that 'best practices' exist in this area of 'staff results'. This is what an expert in the UK said in the statement below:

"Institutions with research-centred Mission, operating at the 'applied end of research' treat their staff much better than their counterparts in Teaching-centred institutions. They offer better condition of service, comfortable office space, attractive financial package, regular allocation from budget, regular attendance at national and international conferences, accommodation, transportation etc."(UK Interviewee #2)

The evidence of 'weakness' in Staff Results Practices #1 can be found in the documentary evidence of practice provided by respondents. These documents identify possible areas of teaching and research activities, which are not being considered as critical and are therefore not being effectively implemented. From Figure 4.10 on page 227 we can see that:

***Discrimination:** - reference #1 to #42*

- *Regulations easily misunderstood and frequently misinterpreted, because it addresses a wide range of issues relating to discrimination on the basis of sex, age, race, colour; rather than ability and skill to do a given task;*
- *Few Managers like to deal with it openly because it offends individual sensitivity at work. The attitude seems to be 'if it is not broken do not fix it', and as far as the majority are concern there is nothing fundamentally wrong or 'broken', however, academic and administrative staff from the ethnic minority community cry foul and demand redress. This is best described as battle of minds, which has led to miss opportunities for creating a diverse community of teachers, learners, scholars, and researchers.*

***Participation:** - reference #1 to #42*

- *Many who get the opportunity to do what they really want after fighting hard for it within their institutions simply become unable to cope in an environment which was not prepared for them in the first place, and so do not get the support they need to carry out their responsibilities effectively;*
- *Even though the society as a whole demands Equal Opportunity, top managers and leaders of institutions continue to pay lip-service; and will only pay serious attention if it impacts significantly on their institution's national and international reputation as a Centre for Academic Excellence.*

Staff Results Practice #2 – [QN = 21]

Staff Results Practice #2 – as briefly described below - relates to the extent to which respondents are personally and actively involved in encouraging and sustaining staff INVOLVEMENT in key IMPROVEMENT DECISIONS and in the implementation process itself.

STAFF INVOLVEMENT

[Staff Results Practice #2, Questionnaire Part Two, Question #21, QN = 21]

Chancellery, Deanery, Heads of Departments, Quality Managers, Programme Leaders and Staff carrying out improvement activities are not very enthusiastic about personally and actively encouraging personal and active involvement of staff in key quality improvement decisions [Code: QN38].

The analysis of the responses to Question #21 in Questionnaire Part Two, suggests that, majority of respondents (90%) thought that Staff Results Practice #2 - is a 'Weak Practice' in terms of being 'moderately important' and 'less effective' in delivering expected improvements. This is a strategic error of judgement on the part of respondents, because from a strategic quality management perspective, involvement of staff in the decision-making process increases their commitment to achieving agreed improvement objectives and targets, and makes staff responsible and accountable (Kanji and Tambi, 2002:101; Oakland, 2003; Thompson, 2003). However, there is empirical justification for these responses, in that there are some who think that in situations where there are no recognition, rewards, or incentives to be given for achieving set objectives, increased staff involvement may not achieve much. This view is eloquently expressed in the statement below, made by an interviewee in the UK:

"Leadership by misinformation is the name of the game. Many academics have long-term interest in maintaining the status quo; and see increased involvement of subordinate staff in key decisions as a threat they ought to eliminate. Yes they know much could be achieved with increased staff participation, but they are myopic and justify their reluctance by saying increased participation prolongs the decision-making process" (UK interviewee #7)

The documentary evidence of practices provided by respondents and interviewees confirms that, some key activities relating to Staff Results Practice #2 – as outlined below - might not have been 'effectively' implemented, even though its relative importance was recognised. From Figure 4.10 we can see that:

***Decision Making Processes:** - reference #1 to #42*

- *Problems and Opportunities relating to Teaching and Research Quality are not well defined, and alternative ways of solving a problem or taking advantage of an opportunity are not rationally evaluated; primarily because a formal deliberate system for decision-making is not in place;*

- *Over-dependence on Top-down decision-making processes, associated with hierarchical organisational structures. This has led to misuse of two-way communications systems, whereby decisions made at the top are communicated downwards and data and information on are passed upwards.*

***Level of Involvement:** - reference #1 to #42*

- *Staff involvement is mainly superficial, where they are required to endorse decisions already made at the top; any attempt to critical is seen as a sign of disloyalty;*

- *Staff involved in less important decisions, leaving them feeling isolated, frustrated, with little or no sense of achievement or value.*

Staff Results Practice #3 – [QN = 22]

Staff Results Practice #3 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in linking staff PERFORMANCE appraisals to REWARD systems. Analysis of the responses to Question #22 in Questionnaire Part Two, suggests that Staff Results Practice #3 is seen by majority (84%) of respondents as an example of a 'weak' practice for not being 'important' or 'effective' and may need to be abandoned or improved upon. This 'weakness' is confirmed by the response to Question #3 under Questionnaire Part Four, which asked respondents about how effective they have been in their attempt to implement links between Staff Performance Indicators and Staff Rewards. Majority (83%) acknowledged that, they have not been successful in actually implementing reward schemes linked to performance indicators.

STAFF PERFORMANCE-REWARD SYSTEMS
[Staff Results Practice #3, Questionnaire Part Two, Question #22, QN = 22]

Chancellery, Deanery, and Heads of Department are personally and actively involved in ensuring that the link between performance and reward is continuously strengthen as part of a long-term policy and strategy for reducing staff-turnover [Code: QN39].

Majority of interviewees attributed this 'weakness' in Staff Results Practice #3, to the lack of leadership commitment to ensuring that, a forceful argument and strong case is put forward as part of the process of acquiring funding for operational activities. Two experts in the UK and USA have this to say:

"In departments where the linkage between 'staff performance' and 'staff reward' is weak, we observed that Staff Turnovers are high. Interestingly, we found out that, there is a clear causal relationship between the two variables. Because anytime we had more money coming our way, and are able as a result to provide rewards in various forms: recognition, promotion, attendance at conferences; change in office; increase in administrative support, etc.; this had led to reduction in staff turnover, and increase in retention rates" (UK interviewee #2)

"Monetary Rewards is not what staff always want for achieving improvement targets. I have been in a situation where all I wanted an incentive for teaching well is reduction in class-size. When I was granted that, it led to reduction in my workload, I was less stressed up, and had more time with my students and my family. I was even able to introduce more innovative ways of helping my students

learn better. The performance-reward linkage must be strengthened by all means" (US Interviewee #10).

The documentary evidence of practices collected during this research further identifies key activities, which might be the root causes of Staff Results Practice #3 being described as a 'weak practice'; these are presented in Figure 4.10 and briefly outlined below as follows:

***Performance Appraisal Systems:** - reference #1 to #42*

- *The Performance Appraisal System (PAS) is not effectively integrated with Performance Management System (PMS), with PAS mainly carried out for External Reporting purposes;*
- *The extent to which Team dynamics impacts on actual performance at work is not regularly taken into consideration in interpreting Appraisal Results;*
- *Procedure for Performance Appraisal Systems (PAS) not varied sufficiently to take account of the steady increase in the demands of Staff with disabilities or difficulties in a work environment.*

***Linkage between Performance and Reward:** - reference #1 to #42*

- *Lobbying still places a major role in process of receiving Rewards or getting Promoted in some institutions; actual performance results and an objective assessment of the long-term potential of individual staff is secondary, and in some cases even ignored in the recruitment new staff or promotion of existing staff;*
- *Lack of action as a result of the unresolved debate about whether the association between performance indicators and rewards is probabilistic or deterministic. Majority of institutions operate on the basis that it is probabilistic;*
- *Performance Measures and Indicators directly linked to Key Institutional Results e.g. TQA and RAE Measures and Results are ranked second to none, at the expense of measures relating to staff performance.*

In summary, the statistical evidence of no linear relationship between the degree of importance and the degree of effectiveness of staff results practices in part explains where these practices are perceived as 'weak' practices. The fact that, the product-moment coefficient (r) is positive - albeit very small in value - may be seen as a good sign. In the sense that staff results practices that are perceived to be 'weak' in terms of being less efficient and less effective can be improved by raising their levels of importance or efficiency and effectiveness in delivering significant improvement in the quality of teaching and research. Figure 4.10 below provides a conceptual framework for effective management of staff results practices. It is an attempt to bring together all the key staff results management practices and critical success factors under a single framework to encourage Quality Managers to become strategically aware of the need to strengthen the association between 'staff management' and 'staff results' criteria.

IMPLEMENTING EQUAL OPPORTUNITY
[Staff Results Practice #1, Questionnaire Part Two, Question #20, QN = 20]

Discrimination:

- *Regulations easily misunderstood and frequently misinterpreted;*
- *Few Managers like to deal with issues of discrimination openly because it offends individual sensitivity at work.*

Participation:

- *Many who get the opportunity to do what they really want after fighting hard for it within their institutions simply become unable to cope in an environment which was not prepared for them in the first place;*
- *Even though the society as a whole demands Equal Opportunity, top managers and leaders of institutions continue to pay lip-service; and will only pay serious attention if it impacts significantly on their institution's national and international reputation as a Centre for Academic Excellence.*

Figure 4.10
Osseo-Asare's Framework for Effective Management of Staff Results for Academic Quality

STAFF INVOLVEMENT
[Staff Results Practice #2, Questionnaire Part Two, Question #21, QN = 21]

Decision Making Processes:

- *Problems and Opportunities relating to Teaching and Research Quality are not well defined, and alternative ways of solving a problem or taking advantage of an opportunity are not rationally evaluated; primarily because a formal deliberate system for decision-making is not in place;*
- *Over-dependent on Top-down decision-making processes, associated with hierarchical organisational structures. This has led to misuse of two-way communications systems, whereby decisions made at the top are communicated downwards and data and information on are passed upwards.*

Level of Involvement:

- *Staff involvement is mainly superficial, where they are required to endorse decisions already made at the top; any attempt to critical is seen as a sign of disloyalty;*
- *Staff involved in less important decisions, leaving them feeling isolated, frustrated, with little or no sense of achievement or value.*

STAFF PERFORMANCE-REWARD SYSTEMS
[Staff Results Practice #3, Questionnaire Part Two, Question #22, QN = 22]

Performance Appraisal Systems:

- *The Performance Appraisal System (PAS) is not effectively integrated with Performance Management System (PMS);*
- *Impact of Team dynamics on actual performance at work is ignored;*
- *Procedure for Performance Appraisal Systems (PAS) not varied sufficiently to take account of the needs of Staff with disabilities or difficulties in a work environment.*

Linkage Between Performance and Reward:

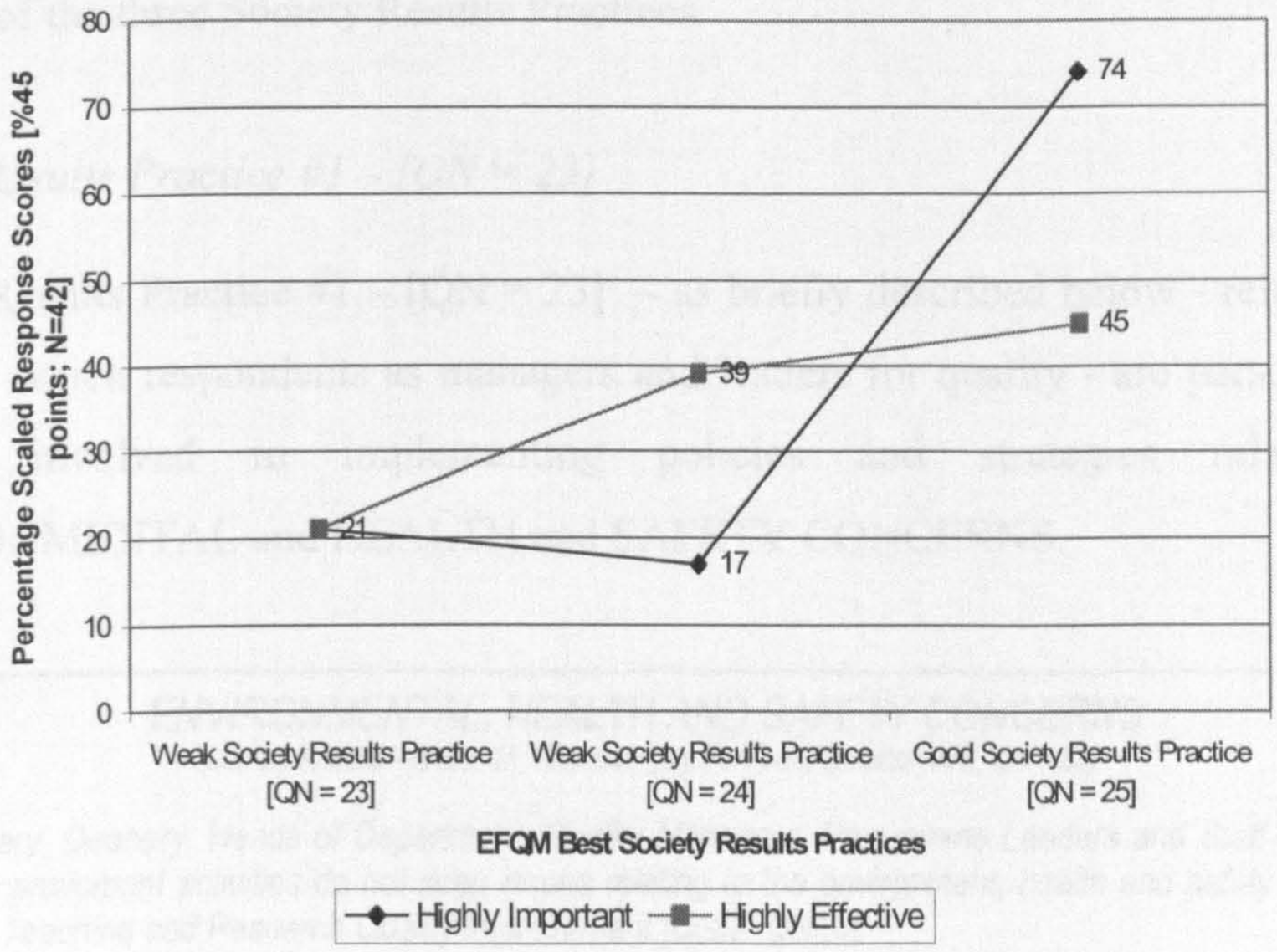
- *Lobbying still places a major role in Staff Promotion and Rewards;*
- *Lack of action as a result of the unresolved debate about whether the association between performance indicators and rewards is probabilistic or deterministic. Majority of institutions operate on the basis that it is probabilistic;*
- *Performance Measures and Indicators directly linked to Key Institutional Results e.g. TQA and RAE Measures and Results are ranked second to none, at the expense of measures relating to staff performance.*

C. Best Practices for Effective Management of Society Results

The literature suggest that many governments are making a strong case for strengthening the partnership between the government and higher education institution in order to resolve some of the social problems associated with lack of a higher education experience (Wilson and Green, 2001). According to the UK Government, the social class gap in entry to higher education remains unacceptably wide, and as part of its strategy to narrow the gap, it has made a case for raising the participation rate to 50% of those aged 18-30. Some see a risk in raising the participation rate, by suggesting that there is a danger that the government might compromise on the quality of student intake, which will impact negatively on the quality of teaching and learning and on the standard of awards (DfES, 2003:8).

Chart 4.8 below shows the overall results for the three Staff Results Practices, which reveals that, majority of respondents considered all *three* Staff Results Practices as representing 'weak practices'.

Chart 4.8
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Society Results Practices
(Source: Based on Questionnaire Part Two - Questions: 23, 24, 25)



The evaluation results for the three Society Results Practices are briefly summarised below from a pessimist's point of view:

- *Society Results Practice #1 - QN = 23: - Described by most respondents (79%) as a WEAK PRACTICE;*
- *Society Results Practice #2 - QN = 24: - Described by many respondents (61%) as a WEAK PRACTICE;*
- *Society Results Practice #3 - QN = 25: - Described by some respondents (45%) as a WEAK PRACTICE.*

Overall the three society results practices represent 'weak' practices despite the fact that, the test statistics - i.e. t-calculated of 10.2439 is greater than the t-critical of 2.0211, and the r = +0.851 - suggest there is a strong positive linear relationship between the degree of 'importance' and the degree of 'effectiveness'. This apparent contradiction may be explained in part by the fact that, the value of the coefficient of determination ($r^2 = 0.149$) suggest that about 15% of the variation in the degree of importance is unexplained by the statistical model. In addition the relationship may actually be curvi-linear and not linear - further research of a statistical nature is required to establish the exact nature of the cause and effect relationship in this case.

Chart 4.8 above, shows the 'perception gaps' or 'quality gaps' for all three Society Results Practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Society Results Practices.

Society Results Practice #1 – [QN = 23]

Society Results Practice #1 – [QN = 23] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in implementing policies and strategies relating the ENVIRONMENTAL and HEALTH and SAFETY CONCERNS.

ENVIRONMENTAL, HEALTH AND SAFETY CONCERNS
[Society Results Practice #1, Questionnaire Part Two, Question #23, QN = 23]

Chancellery, Deanery, Heads of Department, Quality Managers, Programme Leaders and Staff involved in quality improvement activities do not seen issues relating to the environment, health and safety as directly linked to Teaching and Research Quality Improvement [Code: QN40].

The analysis of the responses to Question #23 in Questionnaire Part Two suggests that, majority (79%) of respondents thought that Society Results Practice #2 is a

'weak' practice. This is because the practice was considered to be 'less important' and its implementation has been 'less effective'; as a result of Society Results Practice #2 is not been seen as critical to delivering quality improvement but a mere public relations exercise.

This result is seen by majority of US interviewees as a serious strategic error of judgement on the part of UK respondents. They argued that, from a strategic quality management perspective, long-term negative impact of scientific research activities on the environment and the society as a whole does have serious implications for sustaining 'applied' research quality improvement – if not directly in the areas of teaching and learning. This view is eloquently expressed in the statement below, made by an interviewee in the USA:

"I think most administrators seem to forget that academic activities comprise of Teaching and Research, as a consequence equate academic quality to teaching quality. In that sense, the impact of research activities on the environment and the health and safety of employees - who are an integral part of the society - are strategically ignored. This is a critical factor in our research institutions" (US Interviewee #9)

Inductive analysis of the interview transcripts suggests that, majority of interviewees in the UK and USA agree that society's concern for the 'environment' and 'health and safety' of employees are important in their own right. However, the direct link with issues of academic quality makes the agenda for academic excellence perhaps too broad to handle by higher education managers. Some have suggested the need to define the boundary of academic excellence to make it more realistic and attainable. An interviewee in the UK said:

"The boundary for academic excellence needs to be well defined. We agree it ought to cover, Teaching and Learning, Research and Scholarship – which represent academic activities. We should then add Areas of Administration and Support-services, which are directly linked to academic activities. I think issues of the Environment should form part of the Corporate Social Responsibility of the University Management Team (UK interviewee #14)

Table 4.9 below shows the 'perception gaps' resulting from gaps in relative importance and effectiveness for Staff Results Practice #1, #2, and #3, as discussed in this sub-section. Table 4.9A and 4.9B respectively show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Society Results Practices. How these vital statistics impact on society performance result management decisions for quality improvement will be examined in detail in the next chapter.

Table 4.9
Importance and Effectiveness Gaps for the Three Society Results Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.9A – IMPORTANCE GAP

Students Results	Relative Importance Score	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 23]	21 *	-49	-59
#2 – [QN = 24]	17 *	-53	-63
#3 – [QN = 25]	74 ***	+4	-6

Table 4.9B – EFFECTIVENESS GAP

Students Results	Relative Effectiveness Score	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 23]	21 *	-49	-59
#2 – [QN = 24]	39 *	-31	-41
#3 – [QN = 25]	45 *	-25	-35

Even though majority of respondents (79%) thought Society Results Practice #1 is an example of a 'weak' practice, some UK interviewees acknowledge that these issues are important, even though at present they are not being dealt with directly under Academic Quality Management. This is what an expert in the UK said in the statement below:

"These are very important concerns but I admit that this is an area we as the Teaching and Learning Quality Management Team do not deal with directly. That explains partly why we do not think it is important to our work in a very direct way. We have Teams at both college and departmental levels dealing with issue of the Environment. The Human Resource Department is concerned with Health and Safety issues. We have not implemented the EFQM Excellence Model and therefore are not aware of the benefits in bringing these concerns under one umbrella in a holistic integrated way"(UK Interviewee #2).

The evidence of 'weakness' in Society Results Practices #1 can be found in the documentary evidence provided by respondents. These documents identify possible areas of teaching and research activities, which are not being considered as critical and are therefore not being effectively implemented. From Figure 4.11 on page 285 we can see that:

***Environmental Concerns:** - reference #1 to #42*

- *Press commentary on a number of Environmental Sustainability Projects under taken by some institutions – in particular research-focused pre-1992 universities - have generally been favourable; an indication of favourable Society Perception of Institutional Quality and Performance and Contribution. There is however, more room for improvement in some – in particular post-1992 university now focussing on environmental research;*

- *Less aggressive reporting of institutional activities to assist in the preservation and sustainability of natural resources – choice of transportation for staff and students, reduction of waste, economic usage of gas, water, electricity, recycling materials.*

Health and Safety: - reference #1 to #42

- *Less aggressive in adopting preventive measures to promote Health and Safety at Work despite the fact that Health and Safety Policy and Strategy are excellently documented and circulated to all Staff. An example of a fire-fighting approach to quality management;*

- *Less effective in the management of stress at work. Number of Days off Sick are not effectively monitored and followed up for appropriate action to be taken, in order to control the negative impact of Absenteeism on Staff and Student Morale.*

Society Results Practice #2 – [QN = 24]

Society Results Practice #2 – as briefly described below - relates to the extent to which respondents are personally and actively involved in ensuring that Teaching, Learning, and Research quality improvement efforts contribute significantly to LOCAL and NATIONAL ECONOMIC regeneration efforts of the Local Authority and the National Government. It highlights the need for strengthening the partnership between the state and publicly funded HEIs (Kogan, 1999; DfES, 2003).

IMPACT ON LOCAL AND NATIONAL ECONOMY
[Society Results Practice #2, Questionnaire Part Two, Question #24, QN = 24]

Chancellery, Deanery, Heads of Departments, Quality Managers, Programme Leaders and Staff carrying out improvement activities are not very enthusiastic about involving themselves personally and actively in assessing the impact of teaching and research quality improvement activities on the local and national economy [Code: QN41].

Despite the relative importance of Society Results Practice #2 – at least in the eye of successive UK Governments - the analysis of the responses to Question #24 in Questionnaire Part Two, suggests that, many respondents (61%) thought that it is a 'weak' practice. This is because the practice was deemed less 'important' and 'less effective' in delivering expected levels of quality improvement. Majority of interviewees in both the UK and US see this as a strategic error of judgement on the part of respondents, because from a strategic quality management perspective, social responsibility objectives are increasingly becoming important measures of society's perception of institutional quality and performance. This view is eloquently expressed in the statement below, made by an interviewee in the USA:

"Of course we in academia know very well that these issues are very important indeed; but what do you expect a poorly funded public institution to do when we hardly get enough cash to deal with our immediate concerns which includes: staff shortages, increasing workloads; wages of contract staff, etc. I think you have to be fair it is first things first. However, the picture is not all that gloomy, because despite our short-coming we provide employment for mainly in the community, and raise the profile of the county we operate in, helping to boost tourism etc." (UK Interviewee #8)

"What is the relevance of an institution if it does not benefit the local and national economies? Universities were established to provide answers to local and national problems. This Mission Objective has become more important in today's Knowledge-based Economy" (US Interviewee #11)

However, the empirical justification for these responses – if any - perhaps lies in the statement made by UK interviewee #8 above, suggesting that lack of funding could be blamed for institutions having little impact on their local and national economies. In addition to that, the examination of the documentary evidence of practices provided by respondents and interviewees, identified key activities relating to Society Results Practice #2 – as outlined below - might not have been considered 'important' resulting in lack of effectiveness in their implementation. From Figure 4.11 we can see that:

***Social Re-engineering:** - reference #1 to #42*

- *Some institutions – in particular pre-1992 - have not be very successful in working with the QAA and HEFCE to meet the requirements of Students and Staff with Disabilities;*
- *Many institutions do not have deliberate strategies for dealing with the impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduate; Staff Teaching Practices and Staff Morale.*

***Economic Regeneration:** - reference #1 to #42*

- *Apart from providing employment to the local community, not many institutions are actively involved in support for Sport and Leisure, Voluntary Work and Philanthropy – arguably because of Budgetary constraints;*
- *Most pre-1992 institutions - compared with post-1992 institutions - are frequently cited for National and International Excellence in Research, Scholarship, Teaching and Learning. This in most cases is the direct result of successful collaborations and partnerships with both public and private sector organisations.*

Society Results Practice #3 – [QN = 25]

Society Results Practice #3 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in being role models for excellence. Managers and leaders are expected to ensure that, the BEHAVIOUR of their staff is in accordance with the codes of conduct and ETHICS of their institutions and the professional associations to which they belong.

ETHICAL BEHAVIOUR

[Society Results Practice #3, Questionnaire Part Two, Question #25, QN = 25]

Chancellery, Deanery, Heads of Department, Quality Managers, Programme Leaders, and Staff involved in quality improvement are personally and actively involved in ensuring that the codes of ethics of the institution and the departments are adhered to avoid any bad publicity [Code: QN42].

Analysis of the responses to Question #25 in Questionnaire Part Two, suggests that a reasonable number of respondents (55%) thought the Society Results Practice #3 is an example of a 'Good Practice'. This they argued is based on their perception that the practice is 'highly important' but 'moderately effective' in delivering quality improvement. This practice can be improved upon to become a 'Best Practice' i.e. 'highly important' and 'highly effective'. Majority of interviewees attributed this 'good' practice to the threat of litigation and the effect that bad publicity would have on the image of the institution in the society. An expert in the UK had this to say:

"This is an anti-avoidance measure; left to most institutions nothing would be done. In today's world stakeholder and customer 'perception' of institutional performance and quality means everything. Consumers and Stakeholders' needs and expectations are supreme. If stakeholders want information on your activities you simply have to provide them and do so on time before the tabloids give their version of the 'truth' (UK interviewee #2.)

The documentary evidence of practices collected during this research further identifies key activities, which might be the root causes of Staff Results Practice #3 being described as a 'weak practice'; these are presented in Figure 4.11 and briefly outlined below as follows:

Professionalism: - reference #1 to #42

- *Majority of Staff at all levels of management and leadership – with responsibility for Teaching and Research Quality Improvement - do not belong to any reputable Professional Body promoting Teaching, Learning and Research Quality;*

Intellectual Capital: - reference #1 to #42

- *There is evidence of low value intellectual capital judging from the fact the profile of Staff responsible for Teaching and Research Quality lack knowledge and experience in integrated management and interface management – which are based on multiple disciplines;*

In summary, there is a perception that on the whole society results practices represent 'weak' practices, despite the fact that, there is a strong positive linear relationship between the degree of importance and the degree of effectiveness. Further research is required to establish the exact nature of the relationship in this case. Figure 4.11 on the next page presents a conceptual framework for effective management of society results practices. It attempts to bring together the key 'society results management practices' and critical success factors under a single framework to encourage Quality Managers to become strategically aware of the need be adopt a holistic approach to sustain continuous improvement in academic quality, by pursuing 'social responsibility' objectives.

ENVIRONMENTAL, HEALTH AND SAFETY CONCERNS
[Society Results Practice #1, Questionnaire Part Two, Question #23, QN = 23]

Environmental Concerns:

- *Press commentary on a number of Environmental Sustainability Projects under taken by some institutions – in particular research-focused pre-1992 universities - have generally been favourable; an indication of favourable Society Perception of Institutional Quality and Performance and Contribution. There is however, more room for improvement in some – in particular post-1992 university now focussing on environmental research;*
- *Less aggressive reporting of institutional activities to assist in the preservation and sustainability of natural resources – choice of transportation for staff and students, reduction of waste, economic usage of gas, water, electricity, recycling materials.*

Health and Safety:

- *Less aggressive in adopting preventive measures to promote Health and Safety at Work despite the fact that Health and Safety Policy and Strategy are excellently documented and circulated to all Staff. An example of a fire-fighting approach to quality management;*
- *Less effective in the management of stress at work. Number of Days off Sick are not effectively monitored and followed up for appropriate action to be taken, in order to control the negative impact of Absenteeism on Staff and Student Morale.*

Figure 4.11
Osseo-Asare's Framework for Effective Management of Society Results for Academic Quality

IMPACT ON LOCAL AND NATIONAL ECONOMY
[Society Results Practice #2, Questionnaire Part Two, Question #24, QN = 24]

Social Re-engineering: - Reference id =1 to id =42

- *Some institutions have not be very successful in working with the QAA and HEFCE to meet the requirements of Students and Staff with Disabilities;*
- *Many institutions do not have deliberate strategies for dealing with the impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduate; Staff Teaching Practices and Staff Morale.*

Economic Regeneration: Reference id = 1 to id = 42

- *Apart from providing employment to the local community, not many institutions are actively involved in support for Sport and Leisure – arguably because of Budgetary constraints;*
- *Most pre-1992 institutions - are frequently cited for National and International Excellence in Research, Scholarship, Teaching and Learning. This in most cases is the direct result of successful collaborations and partnerships with both public and private sector organisations.*

ETHICAL BEHAVIOUR
[Society Results Practice #3, Questionnaire Part Two, Question #25, QN = 25]

Professionalism:

- *Majority of Staff at all levels of management and leadership – with responsibility for Teaching and Research Quality Improvement - do not belong to any reputable Professional Body promoting Teaching, Learning and Research Quality;*

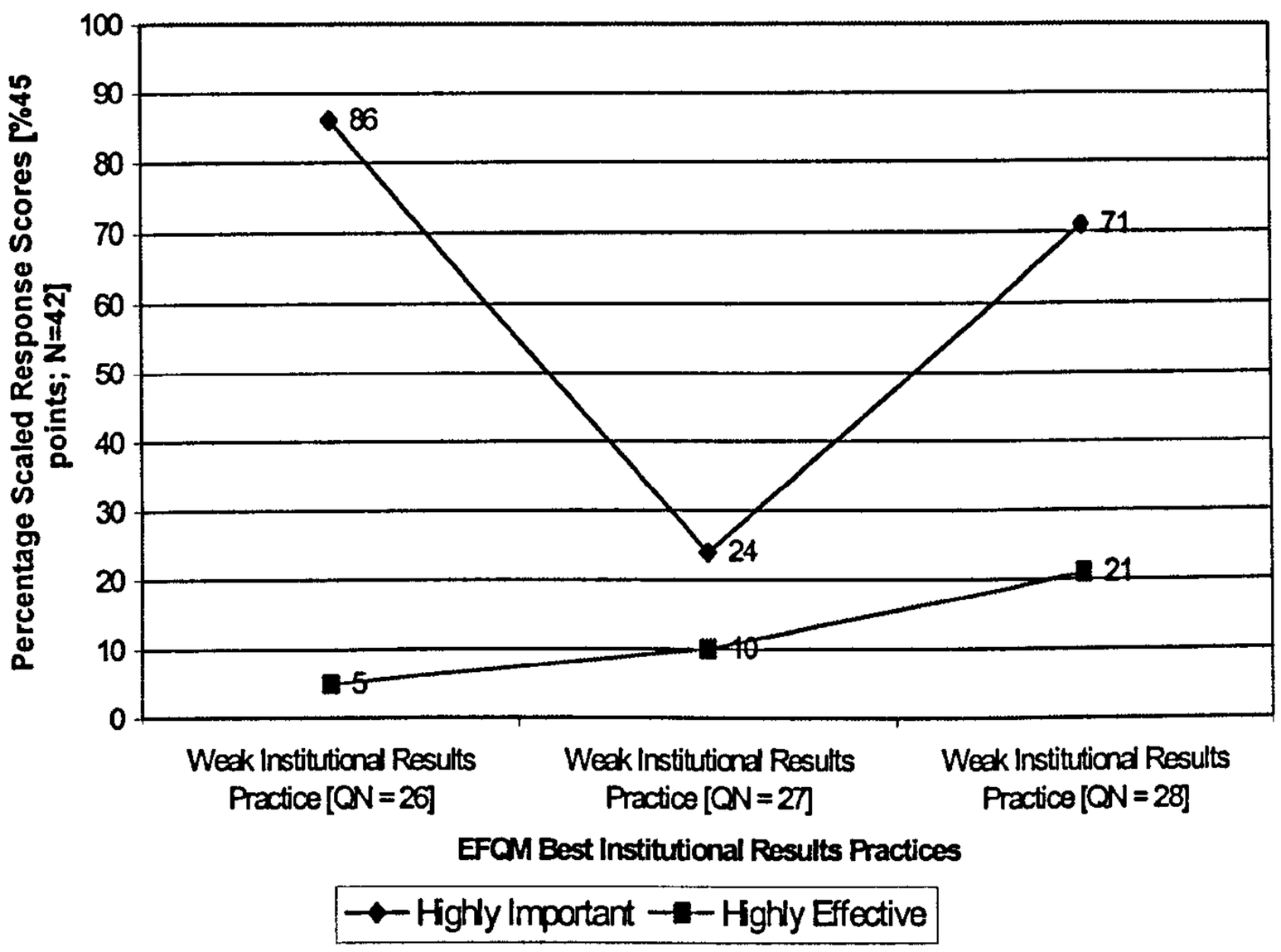
Intellectual Capital:

- *There is evidence of low value intellectual capital judging from the fact the profile of Staff responsible for Teaching and Research Quality lack knowledge and experience in integrated management and interface management – which are based on multiple disciplines;*

D. Best Practices for Effective Management of Institutional Results

The literature suggests that, each higher educational institution - as an organisation - must have a balanced mix of financial and non-financial performance measures (Kaplan and Norton, 1996; Neely, 1998). According to the literature on strategic management, these performance measures ought to reflect the needs and expectations of stakeholders (Thompson, 2003). In the UK higher education industry the needs of 'students', 'the government', and 'staff' are critical to the long-term success of individual institutions (DfES, 2003). Chart 4.9 below shows the overall results for the three Institutional Results Practices, which reveals that, majority of respondents considered all *three* Institutional Results Practices as representing 'weak practices'.

Chart 4.9
Representation of Perception Gaps as Gaps in Importance and Effectiveness of Institutional Results Practices
(Source: Based on Questionnaire Part Two - Questions: 26, 27, 28)



The evaluation results for the three Institutional Results Practices are briefly summarised below from a pessimist's point of view:

- *Institutional Results Practice #1 - QN = 26: - Described by majority of respondents (95%) as a WEAK PRACTICE;*
- *Institutional Results Practice #2 - QN = 27: - Described by majority of respondents (90%) as a WEAK PRACTICE;*
- *Institutional Results Practice #3 - QN = 28: - Described by majority of respondents (79%) as a WEAK PRACTICE.*

The fact that the three institutional results practices on the whole represent 'weak' practices is confirmed by the test statistics, which show that, the t-calculated of 0.1328 is less than the t-critical of 2.0211. This suggests that, the null hypothesis i.e. Ho: $\rho = 0$, that there is no linear relationship between the degree of 'importance' and the degree of 'effectiveness' should be accepted. The expectation is to accept the alternative hypothesis (H1: $\rho \neq 0$) that, there is a strong positive linear relationship between 'importance' and 'effectiveness' as a condition for categorising a quality management practice as a best practice. This was however, not the case with respect to the institutional result practices in the HEIs, which participated in this research study.

Chart 4.9 above, shows the 'perception gaps' or 'quality gaps' for all three Institutional Results Practices for which appropriate strategies need to be successfully implemented in order to close the gaps. We shall now proceed to discuss the results for each of the three Institutional Results Practices.

Institutional Results Practice #1 – [QN = 26]

Institutional Results Practice #1 – [QN = 26] – as briefly described below - relates to the extent to which respondents as managers and leaders for quality - are personally and actively involved in implementing policies and strategies which will result in a BALANCED BUDGET. This is expected at least in areas relating Quality Improvement and Management – if not for the departmental and institutional budgets as a whole.

BALANCED BUDGET

[Institutional Results Practice #1, Questionnaire Part Two, Question #26, QN = 26]

Chancellery, Deanery, Heads of Department, and Budget Holders at all levels have not been successful at efficient reallocation and utilisation of moneys made available to them, in their respective Budget Centres [Code: QN43].

The analysis of the responses to Question #26 in Questionnaire Part Two suggests that, majority of respondents (95%) thought that Institutional Results Practice #1 is seen a 'weak' practice. This is because even though the practice is seen to be 'highly important', there is often difficulties in achieving a balanced budget, therefore making the practice 'less effective' in delivering quality improvement. Majority of interviewees is this 'difficulty' as a major dilemma for Budget Holders, who are not

able to efficiently reallocate their budgets because they do not have a definite plan on what the moneys should be used, and the basis on which the moneys should be reallocated. This view is eloquently expressed in the statement below, made by interviewees in both the UK and US:

"Recently, my department was allocated a large sum of funds out of the blue, due to the extensive lobbying on the part of the Dean. Upon receiving this money we simply did not know what to do with believe or not, that is to say we had no plan. Receiving Funds before planning what to do with it can be difficult even for Financial Managers. E actually found out that at the end of the financial year we struggled to account for every pound used – there were rather too many miscellaneous items. What has that got to do with Teaching and Research Quality Improvement" (UK Interviewee #7)

"Financial Planning is key to efficient allocation of Budgets. Lack of planning leads to misappropriation of funds and financial mismanagement. This makes it even more difficult to achieve a balanced budget – in the sense that moneys received must equal moneys used. Net receipts at the end of the financial year usually suggests the institution had no need of the excess income" (US Interviewee #11)

Table 4.10 below shows the 'perception gaps' resulting from gaps in relative importance and effectiveness for Institutional Results Practice #1, #2, and #3, as discussed in this sub-section. Table 4.10A and 4.10B respectively show the *Relative Importance Scores* (RISs), the *Relative Effectiveness Scores* (RESs), and the corresponding *Best Practice* (BPGs) and *Excellence* (EXGs) *Gaps* for each of the three Institutional Results Practices. How these vital statistics impact on institutional performance management decisions for quality improvement will be examined in detail in the next chapter.

Table 4.10
Importance and Effectiveness Gaps for the Three Institutional Results Practices
Source: Osseo-Asare (2003)

* Weak Practice [0-45%]; ** Good Practice [46-69%]; *** Best Practice [70-79%]; **** Excellence [80-100%]

Table 4.10A – IMPORTANCE GAP

Institutional Results	Relative Importance Score	IMPORTANCE GAP	
		Best Practice Gap = BPG	*Excellence Gap = EXG*
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 26]	86 ****	+16	+6
#2 – [QN = 27]	24 *	-46	-56
#3 – [QN = 28]	71 ***	+1	-9

Table 4.10B – EFFECTIVENESS GAP

Institutional Results	Relative Effectiveness Score	EFFECTIVENESS GAP	
		Best Practice Gap = BPG	Excellence Gap = EXG
	%	[Score – 70 = BPG]	[Score – 80 = EXG]
#1 – [QN = 26]	5 *	-65	-75
#2 – [QN = 27]	10 *	-60	-70
#3 – [QN = 28]	21 *	-49	-59

Even though majority of respondents (95%) thought Institutional Results Practice #1 is an example of a 'weak' practice, some UK interviewees acknowledge that these

issues are still highly important. This is what an expert in the UK said in the statement below:

"Achieving a Balanced Budget for a Public Sector Organisation such as higher education institutions is a good indicator of financial prudence. It means managers and leaders act in consonant with their Mission and Vision, in formulating Policies and Strategies for achieving predetermined Financial and Non-financial Objectives and Targets. For institutions to show surpluses every year is a sense they probably do not have viable projects to spend the money on. It does happen, but when it happens most of the time that is worrying"(UK Interviewee #6).

The evidence of 'weakness' in Institutional Results Practices #1 can be found in the documentary evidence provided by respondents. These documents identify possible areas of teaching and research activities, which are probably not being effectively implemented. From Figure 4.12 on page 293 we can see that:

***Teaching Budget and Teaching Assessment Results:** - reference #1 to #42*

- *Not all institutions use a comprehensive and balanced set of Financial and Non-financial Measures;*
- *Some institutions have experienced negative trends in meeting Teaching Budgets over a five-year period;*
- *Some institutions have not gained any outstanding Teaching and Learning Performance against Teaching and Learning Quality Improvement Objectives and Targets, over a five-year period;*
- *Teaching Quality Assessment (TQA) Results cannot be linked to Planned Teaching Quality Improvement Exercises, and to Teaching Quality Improvement Policy, Strategy, Objectives and Targets.*

***Research Budget and Research Assessment Results:** - reference #1 to #42*

- *Not all institutions use a comprehensive and balanced set of Financial and Non-financial Measures;*
- *Negative trend in meeting Research Budgets over a five-year period;*
- *Some institutions have not gained any outstanding Research Performance against Research Quality Improvement Objectives and Targets, over 5 – 10 year period;*
- *Research Assessment Exercise (RAE) Results cannot be linked to Planned Research Quality Improvement Exercises, and to Research Quality Improvement Policy, Strategy, Objectives and Targets.*

Society Results Practice #2 – [QN = 24]

Institutional Results Practice #2 – as briefly described below - relates to the extent to which respondents are personally and actively involved in ensuring budgetary allocation are adequate to meet STAFF requirements, and matches expected number of STUDENTS per programme per classroom. It highlights the need for accurate determination of the financial inputs for budget preparation.

STAFF-STUDENT RATIO

[Institutional Results Practice #2, Questionnaire Part Two, Question #27, QN = 27]

Chancellery, Deanery, Heads of Departments, and Quality Managers do not have effective staff retention policy and strategy in place to help reduce staff-turnover in order to sustain teaching and research quality improvement [Code: QN44].

The analysis of the responses to Question #27 in Questionnaire Part Two, suggests that, majority (90%) of respondents thought that Institutional Results Practice #2 is a 'Weak Practice' in terms of being 'less important' and 'less effective' in delivering expected levels of quality improvement. Majority of interviewees argued that 'staff-student ratio' is an 'important' indicator of institutional efficiency, and suggested that the lack of an 'effective' staff retention plan, stems from lack of funding which can also be linked to poor pay and poor working conditions. The view on 'insufficient funding' and 'poor pay and poor working environment' is eloquently expressed in the statements below, made by interviewees in the UK and USA:

"I know some departments where members of staff simply do not get on well with the Quality Manager, Head of Department, the Dean and even the Chancellor. The main cause is personality differences, however, when you really look at it, these differences which I think is natural are aggravated by insufficient funds to reward staff through promotions, attendance at international conferences, etc. These situations are more prevalent in Modern Universities than Old Universities like Oxford and Cambridge were working conditions are more or less set in stone. (UK Interviewee #4)

"It is our policy not to discuss remuneration matters opening, because all issues relating to remuneration are straightened out before you join the institution. If you are not happy with it you simply do not take the offer. In this way we have minimised Trade Union involvement in our staff management decisions, and have succeeded in creating a more stable environment within which excellence can be sustained " (US interviewee #12)

A forensic examination of the documentary evidence of practices provided by respondents and interviewees identified key activities relating to Institutional Results Practice #2 – as outlined below – which might not have been considered 'important' resulting in lack of 'effectiveness' in their implementation. From Figure 4.12 we can see that:

Staff Motivation: - reference #1 to #42

- *Some institutions have not met their Staff Budgets for a five-year period, and are now dealing with serious staff retention, and recruitment problems;*

- *Irregular supply of teaching resources, because of budgetary constraints; as a consequence some institutions are experiencing sharp reduction in the number of supplier invoices paid within 30 days over a three-year period.*

Students Learning Experience: - reference #1 to #42

- *Some institutions have experience rising class sizes, stemming from discontinued programmes, frequent restructuring exercised, staff shortages and lack of regular maintenance and increased investment in teaching and research infrastructure;*

- *Fewer assignments and reduced number of face-to-face contacts with Teaching Staff and/or Dissertation Supervisors, is impacting on the Quality of Students Learning Experience.*

Institutional Results Practice #3 – [QN = 28]

Institutional Results Practice #3 – as briefly described below - relates to the extent to which respondents as managers and leaders - are personally and actively involved in ensuring that improvement targets are adequately matched by corresponding FUNDING INCREASES on continuous basis. It suggests that, every effort ought to be made to close perceived 'funding gaps' in order to prevent 'quality gaps' from becoming wider.

SUSTAINING FUNDING INCREASES

[Institutional Results Practice #3, Questionnaire Part Two, Question #28, QN = 28]

Finance Managers and Fund Raisers and Budget Holders at the Chancellery and Deanery, including Heads of Department, Quality Managers, Programme Leaders are personally and actively involved in identifying projects which will help bring in more investment funds to sustain infrastructure for teaching and learning, research and scholarship activities [Code: QN45].

Analysis of the responses to Question #28 in Questionnaire Part Two, suggests that majority of respondents (79%) thought that Institutional Results Practice #3 is an example of a 'Weak Practice' – in terms of no being 'effectively' implemented - which may have to be eliminated or improved upon. Majority of interviewees attributed this 'weakness' to the lack of a clear strategic direction in some departments and institutions to drive and sustain quality improvement. As a consequence much of what is done to improve teaching and research quality is done on 'ad hoc' basis not 'continuous' basis; the later is based on long-term quality planning, and the former is short-term quality planning. The concept of Total Quality Management suggests that 'sustainability' is based on 'long-term quality planning' and therefore 'continuous quality improvement' (Dale, 1999; Oakland, 2003). An expert in the UK had this to say:

"I'm afraid when it comes to teaching and research quality 'long-term' consideration and commitment are a luxury we would rather like to do away with. The emphasis is to satisfy the short-term demands of students, the QAA and HEFCE and Potential Employers – long-range quality planning is simply rhetorical to create a grand image of our institution. This attitude is common in publicly funded

institutions. Privately funded institutions take Quality much more seriously and have elaborate plans for achieving long-term continuous quality and performance improvement"(UK Interviewee #2)

The view expressed by the above UK interviewee is supported by the documentary evidence of practice collected during this research study, which identified key activities, which might be the root causes of Staff Results Practice #3 being described as a 'weak practice'. These areas of activity and examples of practices linked to them are presented in Figure 4.12 and briefly outlined below as follows:

***Liquidity Problems:** - reference #1 to #42*

- *Inaccurate Cash Forecasts for carrying out Teaching and Research Quality improvement, commonly blamed on poor Teaching and Research Quality Planning;*

- *Short-term Quality Improvement Plans are not effectively integrated with Long-term Quality Improvement Plan, resulting in misappropriation of resources and missed opportunities.*

***Investment in Teaching and Research Infrastructure:** - reference #1 to #42*

- *Leadership of many institutions are heavily dependent on the Government's Budgetary increases in Funding for investment in Teaching and Research Infrastructure, and have been very reactive in diversifying their sources of incomes to match the Expenditure outlay for clearing the funding backlog and provide for new infrastructure;*

- *Lack of deliberate strategies to deal with the backlog in funding for teaching and research infrastructure, because of lack of a Long-term Quality Improvement Plan.*

In summary, the perception that institutional results practices in participating institutions overall represent 'weak' quality management practices is confirmed by the test statistics which show that t-calculated is less that t-critical. The implication is that, the lack of a strong positive linear relationship between the degree of importance and the degree of effectiveness is the main reason why these practices are weak. It suggests that efforts aimed at improving these practices should seek to improve their relative importance and effectiveness in delivering significant improvement in teaching and research quality.

Figure 4.12 on the next page presents a conceptual framework for effective management of institutional results practices. It represents an attempt to bring together all the key institutional results management practices and critical success factors under a single framework. It is hoped by so doing academics and practitioners will be encouraged to become strategically aware of the need not to loose sight of the key institutional performance results in the maze of multiple and often conflicting needs and expectations of various stakeholders needs and expectation.

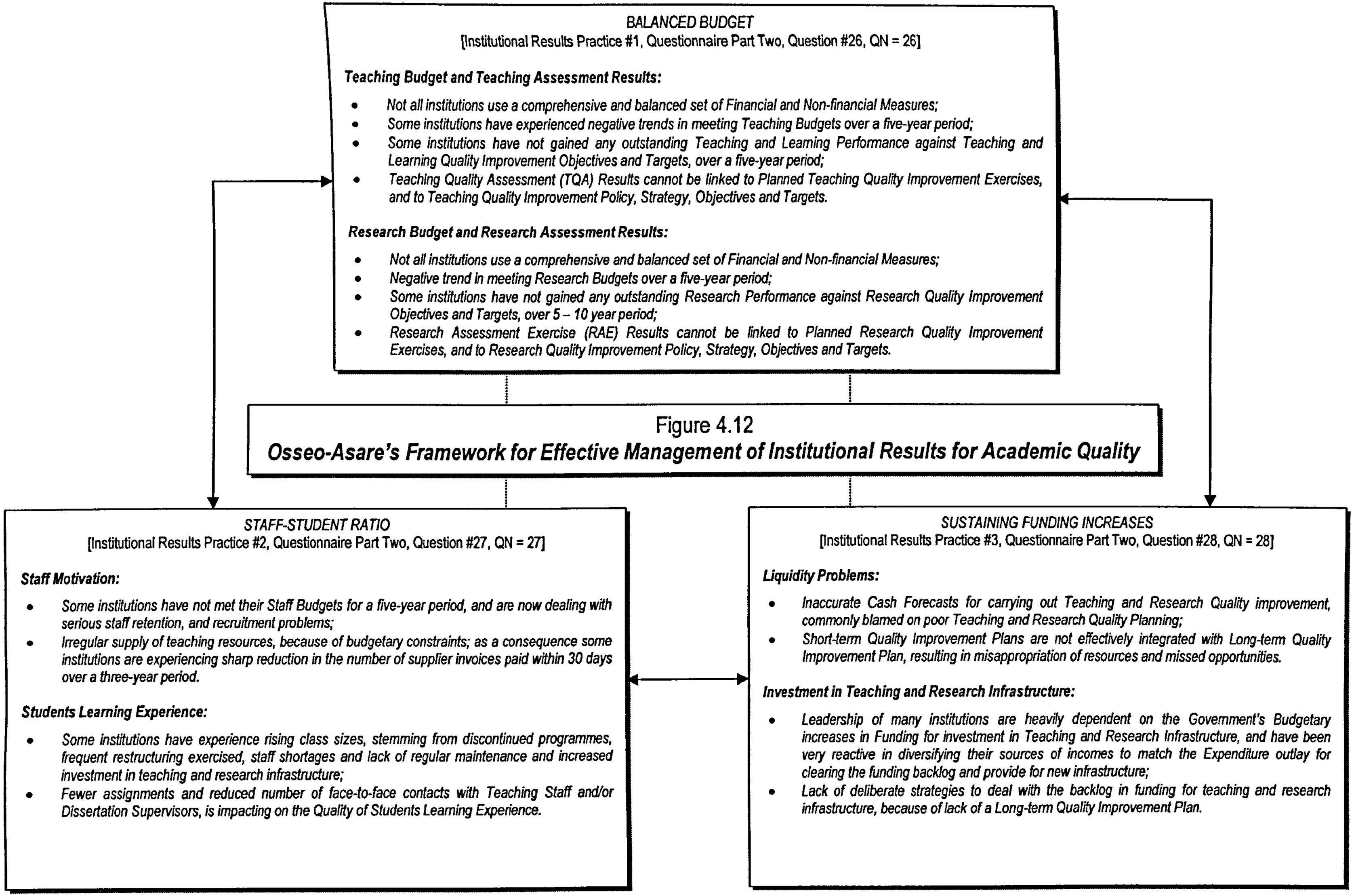


Figure 4.12
Osseo-Asare's Framework for Effective Management of Institutional Results for Academic Quality

Summary of the Conceptual Frameworks for Effective Management of Accountability' Criteria

Section [4.2] discussed the empirical results by focussing on the probable association between:

- *The last 24 critical success factors (CSFs) in the Pool of CSFs under Appendix C3 and the Best Practices in Appendix C4;*
- *The degree of importance and the degree of effectiveness of the 28 quality management practices in Questionnaire Part Two.*

The understanding of the probable associations between the critical success factors and best practices led to:

- *The development of 'four' conceptual frameworks for effective management of the following four 'results' criteria: (1) students; (2) staff; (3) society; and (4) institutions. Each conceptual framework comprises of secondary critical success factors and the best practices associated with them.*
- *The four 'results' criteria being re-categorised as 'accountability' criteria because they were found to be synonymous with demands by internal and external stakeholder for higher quality and accountability.*

Finally, even though overall the test statistics suggested that, a linear relationship exist between the degree of 'importance' and the degree of effectiveness of the results practices, what remains uncertain however, is whether or not the relationship is rather curvilinear. For instance society results practices were described as being overall 'weak'; yet the test statistics suggest there is a strong positive linear relationship between the degrees of importance and effectiveness. This suggests that further research will be necessary in order to establish the exact nature of the association between the degrees of importance and effectiveness for each 'results' practice.

4.2.2. Summary of Chapter Four and Link with Chapter Five

Chapter Four discussed the probable association between the critical success factors in Appendix C3 and the best quality management practices in Appendix C4. The discussion was underpinned by the assumption that, respondents' 'perception gap' may be explained by test statistics based on the null hypothesis (Ho: $\rho = 0$) that, there is no linear relationship between the degree of importance and the degree of effectiveness of each quality management practice under study. The pool of critical success factors were grouped under five 'enabler' or 'autonomy' criteria and four 'results' or 'accountability' criteria on the basis of the probable associations between critical

success factors and best practices. The Best Practices Evaluation Exercise led to the identification of 1 Best Practice, 2 Good Practices, 25 Weak Practices, and No Excellent Practices in the participating UK HEIs; as listed in Table 4.11 below.

Table 4.11
A List of Weak, Good, and Best Practices in UK Higher Education Institutions
Source: Osseo-Asare Jr. 2003

QN = Question Number under Questionnaire Part Two; LD = Leadership; PS = Policy & Strategy; SM = Staff Management; RP = Resources & Partnerships; PR = Processes; SR = Students Results; STR = Staff Results; SOR = Society Results; BB = Best-Best; EW = Excellent-Weak; GW = Good-Weak; WW = Weak-Weak; BW = Best-Weak; BG = Best-Good

QN	Quality Management Practices – Code/Results	Category Based on Scoring Mechanism			
		Weak	Good	Best	Excellent
1	Mission, Vision, Values, Principles, Policy, Strategy, Objectives and Targets – LD/BB			+	
2	Internal and External Communication Infrastructure – LD/EW	+			
3	Empowerment and Motivation of Staff – LD/GW	+			
4	Support and Encouragement of Staff – LD/WW	+			
5	Stakeholder Needs and Expectations – PS/GW	+			
6	Process Ownership and Improvement – PS/EW	+			
7	Data, Information, Intelligence and Knowledge Management – PS/GW	+			
8	Staff Performance, Policy and Strategy – SM/GW	+			
9	Staff Empowerment and Leadership – SM/GW	+			
10	Staff Support, Motivation and Rewards – SM/EW	+			
11	Creating and Sustaining Synergies – RP/GW	+			
12	Diversification of Sources of Funding for Academic Quality Improvement – RP/BW	+			
13	Acquisition, Allocation, and Utilisation of Funds for Quality – RP/BG		+		
14	Maintaining a Framework of Core Processes – PR/BW	+			
15	Process Ownership for Improvement – PR/GW	+			
16	Sustaining Continuous Process Improvement – PR/EW	+			
17	Monitoring and Addressing Students' Complaints – SR/BW	+			
18	Students' Satisfaction and Delight – SR/WW	+			
19	Incorporating Students' Feedback into Improvement Activities – SR/GW	+			
20	Implementing Equal Opportunity Policy and Strategy – STR/WW	+			
21	Staff Involvement in Key Improvement Decisions – STR/GW	+			
22	Staff Performance-Reward Systems – STR/WW	+			
23	Environmental Concerns and Health and Safety - SOR/WW	+			
24	Impact on Local and National Economy – SOR/WW	+			
25	Institutions' Ethical Behaviour – SOR/BG		+		
26	Balancing the Budget at Departmental and Institutional Levels – IR/EW	+			
27	Managing the Staff-Student Ratio – IR/WW	+			
28	Sustaining Funding Increases – IR/BW	+			
	TOTAL NUMBER OF PRACTICES As Per Practice Category: [N = 28]	**25**	**2**	**1**	**0**

The test statistics confirm that, overall the quality management practices listed in Table 4.11 represent 'weak' practices for three reasons:

- *t-calculated is less than t-critical suggesting there is no linear relationship between the degree of importance and the degree of effectiveness of practices - given that t-critical is 2.0211 at 95% level of significance i.e. alpha value α = 0.05; degrees of freedom (n - 2) =40; and a two tail t distribution.*
- *t-calculated is greater than t-critical suggesting that although there is a linear relationship, the product moment coefficient (r) is 'negative' i.e. the relationship is inverse when it should be 'positive' as expected for best practices.*

- *the r-value is positive but close to a zero figure suggesting that, although there is a positive linear relationship it is not strong.*

The above findings have serious strategic implications for sustaining quality improvement in UK HEIs, and alternative interpretations will be provided under Chapter Five. The Osseo-Asare's Scoring Mechanism takes a 'pessimistic' view in deciding whether a practice was deemed 'weak', 'good', 'best', or 'excellent' in terms of the importance-effectiveness evaluation criteria based on the definitions below:

- *WEAK PRACTICES are practices that are: weak-weak (WW); or 'good-weak' (GW), 'best-weak' (BW), or 'excellent-weak' (EW);*
- *GOOD PRACTICES are practices that are: 'good-good', 'good-best', and 'good-excellent;*
- *EXCELLENT PRACTICES are practices that are: only 'excellent-excellent'.*

Unlike the EFQM and Kanji's Scoring Mechanisms, the Osseo-Asare's Scoring Mechanism explicitly defines 'weak', 'good', 'best', and 'excellent' practices in terms of the degree of 'importance or efficiency' and the degree of 'effectiveness' - making it a stricter scoring mechanism.

For each of the 'five' enabler and 'four' results criteria, a comprehensive list of critical success factors (CSFs) are provided; followed by a list of best practices associated with each CSF; and a descriptive account of the nature of the association between the Critical Success Factors and Best Practice. Finally, the discussions in this chapter confirm that, the three secondary doctoral research objectives have successfully being achieved. These objectives are (1) to *identify critical success factors (2) to identify best practices associated with each critical success factor and (3) to describe any probable associations between critical success factors and best practices as basis for creating an inductive theory for developing a conceptual academic quality management model.* The purpose of achieving these three doctoral research objectives is to set the base for creating an INDUCTIVE THEORY from the probable associations between the Critical Success Factors and/or the Best Practices. The theory will then be used to develop a CONCEPTUAL MODEL for sustaining academic quality improvement in UK higher education institutions – the primary doctoral research objective. This will be the focus of Chapter Five on *Interpretation of Findings.*

chapter | five

INTERPRETATION OF EMPIRICAL RESEARCH FINDINGS

Chapter Five interprets the empirical research findings in Chapter Four by focussing on meaning derived from the established relationships between the critical success factors (CSFs) and best practices. The various frameworks for effective management of 'autonomy' and 'accountability' criteria are transformed into a model for sustaining quality improvement in UK higher education institutions. Chapter Five comprises of two sections: Section [5.1], creates a theory inductively using the concepts, principles, and assumptions derived from the associations between CSFs and best practices; it introduces the notion of 'best practice gaps' (BPGs), for generating alternative strategies for closing perception gaps. It also created a number of 'secondary' models as building blocks for developing a composite academic quality model. Section [5.2] combines the frameworks for effective management of 'autonomy' and 'accountability' criteria into an alternative model for sustaining academic quality improvement and management in UK higher education. The overall aim is to expose the logical steps in the creation of theory and development of the holistic and integrated model for sustaining academic quality improvement. It demonstrates the successful achievement of the primary doctoral research objective.

"...TQM...should be meshed seamlessly with a model addressing the core areas of teaching and learning. The composite (model) would then become a holistic model for quality in Higher Education" (Srikanthan and Dalrymple, 2001:566)

5.1

Creation of an Inductive Theory for Sustaining Academic Quality Improvement

"The search for an all-encompassing model is simplistic, for no one model can delineate the intricacies of decision processes in complex organisations such as universities and colleges...there is a pleasant parsimony about having a single model that summaries a complicated world for us. This is not bad except when we allow our models to blind us to important features of the organisation."(Baldridge et al. 1978:28)

The World Business Council for Sustainable Development (2002:6) in the publication titled: *Sustainability through the Market: Seven Keys to Success,* see 'sustainability' as a strategy for improvement, which provides for good institutional performance results today and even better results tomorrow. According to the British Quality Foundation (2000:9), 'excellent' organisations are those that possess the ability to achieve and sustain world-class or excellent performance results for all their stakeholders; and adopt a holistic integrated approach to quality improvement and management based on well established strategic quality management concepts and principles.

Figure 5.1 below and Appendix D1 on page 519 present a logical framework for creating an inductive theory from empiricism for the purpose of developing an Academic Excellence Model. The Inductively derived Theory incorporates philosophical and empirical assumptions, emanating from teaching, learning, scholarship and research quality management ideas, concepts, and principles, which underpin the different conceptual frameworks developed earlier in Chapter Four for effective management of the 'autonomy' and 'accountability' criteria. Empirical evidence from the Questionnaire Survey and Semi-structured Interviews suggest that, majority of respondents and interviewees are more comfortable with using the modified EFQM terminology in Table 5.1 below – because they reflect the context of higher education. Some even suggested the replacement of the 'EF' i.e. European Foundation in 'EFQM' with 'S' for Sustainable, so that instead of 'EFQM' we should

have 'SQM' for 'Sustainable Quality Management'. Some interviewees argued that, a change in terminology has the potential of making the whole EFQM package appealing and acceptable in UK Higher Education; which will give the Model a much stronger 'selling' proposition. It also has long-term implications for Total Quality Management in Higher Education environment.

Figure 5.1
Model for Creating an Inductive Theory for Academic Quality Management
Source: Osseo-Asare Jr 2003

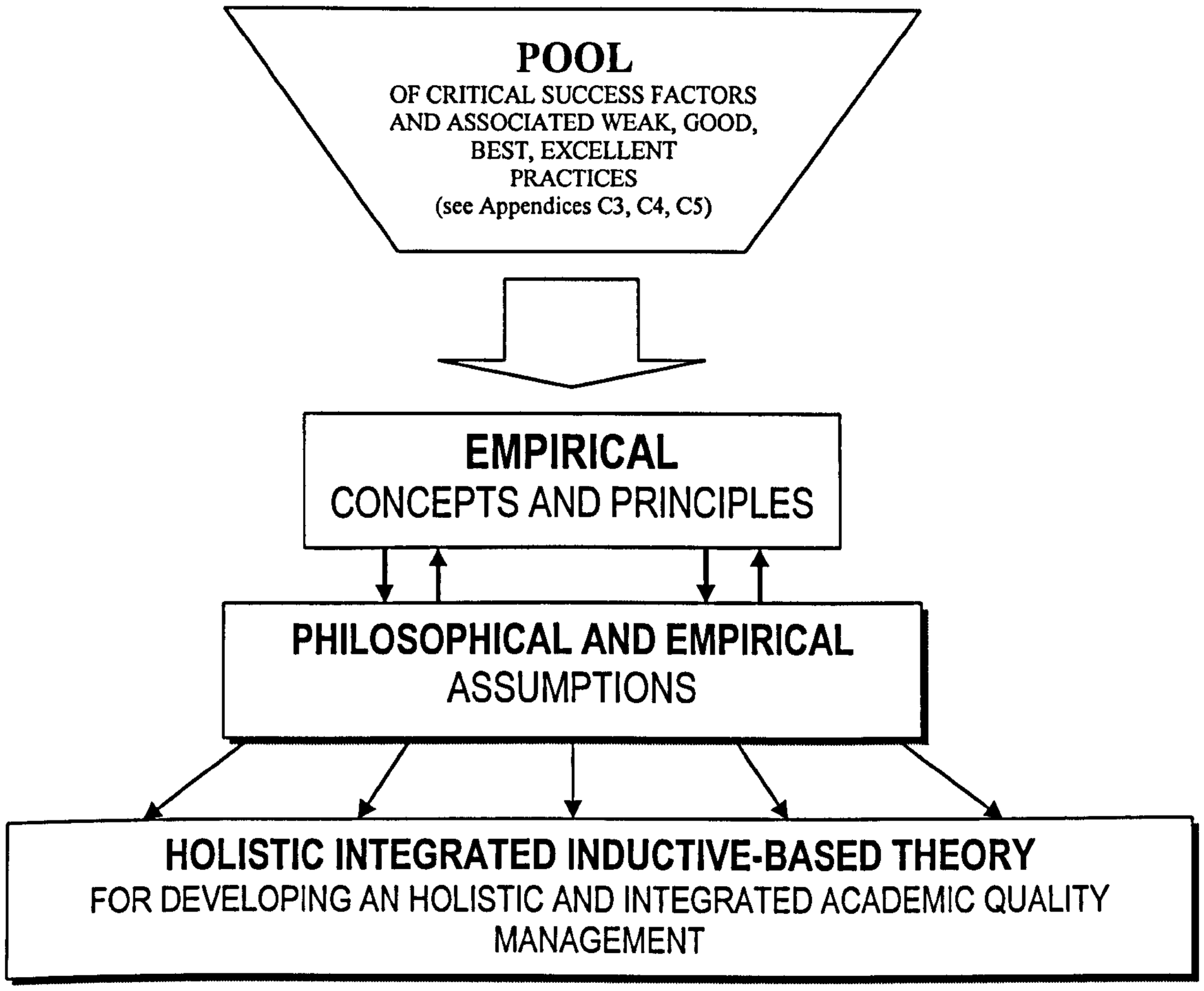


Table 5.1
Modified EFQM Model Terminology
Source: EFQM (2003), Osseo-Asare Jr. (2003)

EFQM = European Foundation for Quality Management; SQM = Sustainable Quality Management

No.	EFQM Current Terminology	Modified EFQM Main Criteria for UK Higher Education = SQM
	ENABLER CRITERIA	
1	Leadership	Managerial Leadership for Academic Quality
2	Policy and Strategy	Quality Improvement Policy, Strategy, Objectives and Targets
3	People Management	Staff Performance Management
4	Partnerships and Resources	Internal and External Resources Management
5	Processes	Framework of Core Academic, Administrative, and Support-service Processes
	RESULTS CRITERIA	
6	Customer Results	Students as Customers Performance Results Management
7	People Results	Staff Performance Results and Rewards Management
8	Society Results	Society Performance Results Management
9	Key Performance Results	Key Institutional Performance Results Management

In this doctoral research thesis, the modified terminology is the 'architectural' foundation on which the academic excellence model is built. The philosophical and empirical assumptions used, also incorporate concepts and principles from the descriptive account of the probabilistic causal relationships between the critical success factors and the quality management best practices associated with them.

The above evidence indicates that, the EFQM Excellence Model – baring its shortcomings with respect to misconceptions about terminology – is still relevant to quality development in UK higher education institutions as an alternative model, which needs to be fully evaluated in terms of its relative 'efficiency' and 'effectiveness' before full-scale implementation is embarked upon. Figure 5.1 above, shows how this researcher used the Pool of Critical Success Factors (CSFs) and associated Quality Management Practices, as the basic building blocks for constructing the holistic and integrated inductive theory for developing the academic quality model. The main strategic reasons for using CSFs for 'theory creation' are outlined below:

- *CSFs underpin the concepts and principles of Strategic or TQM;*
- *CSFs are known to have direct impact on the success and long-term survival of an organisation;*
- *CSFs that are empirically derived are more acceptable and readily applicable to organisations than those that are imposed;*
- *CSFs are drawn from the Internal, External, and Competitive Environment in which organisations operate; and therefore help to identify the 'strengths' and 'weaknesses' within the organisation, 'opportunities' and 'threats' facing the organisation as a result of changes in the external and competitive environment;*
- *CSFs are the bases on which the following well-known Quality Management Models were developed: Deming Prize Award in Japan, Malcolm Baldrige National Quality Award (MBNQA) in the USA, EFQM Excellence Model in Europe and Kanji Business Excellence Model in the UK.*

The CSFs framework is undoubtedly a tried and tested methodology for model building used by the 'masters' or so-called 'quality gurus'. A major drawback in using them, however, lies in the fact that, a large number of factors may be identified at a particular moment in time, which have to be critically evaluated, ranked, selected and subsequently implemented. The process is time consuming, and it is possible that, overtime some of the factors become out-of-date and therefore irrelevant because

their ranking – in terms of their relative importance and effectiveness – is intimately tired to changes in the internal, external and competitive environment in which organisations operate. In this research study, the use of CSFs is taken a bit further by identifying the best teaching and research quality management practices associated with each CSF. The purpose of doing so is to determine factor sensitivity to changes in the environment, using the notion of Best Practice Gaps (BPGs) derived from the Gaps in respondents' perceptions about the relative importance and effectiveness of a particular quality management practice being evaluated.

5.1.1. Creating Theory from Empirical Data

The theory created in this thesis is inductively derived in the sense that *meaning* is grounded in the empirical data collected, analysed, and the results presented under Appendix C3, C4, C5 and C6. Appendix C5 presents a list of 152 tasks and activities for improving the efficiency and effectiveness of quality improvement practices - this list is drawn from the frameworks for effective management of the 'autonomy' and 'accountability' criteria developed in Chapter Four. The 'primary' and 'secondary' CSFs in Appendices C3a and C3b respectively are therefore linked to the list of tasks, activities and processes under Appendices C4 and C5. Appendix C6 presents a list of 125 'concepts and principles', drawn from Appendix C5.

A. Concepts and Principles Derived from Pools of CSFs and Best Practices

Table 5.2 below, condenses the list in Appendix C6 into 24 key concepts and principles based on the established association between the critical success factors. Table 5.2 also shows the actual 'codes' used, which traces the origins of each 'concept or principle' and the 'association' between them. For example, Concept #1 in Table 5.2, was derived from Leadership Practice #1, representing Question #1 under Questionnaire Part Two; which is linked to 'secondary' CSFs such as: Mission [code: 1.1] and Vision [code: 1.2]. This means that the first digit '1' in the Code [1.1.1] indicates 'leadership' is the primary CSF; the second digit '1' indicates 'mission' is the secondary CSF; and the third digit '1' identifies the specific task, activity, or process linked to the secondary CSF - see Appendix C5 for more details. These 'concepts and principles' for effective management of quality in higher education are underpinned by philosophical and empirical 'assumptions', which are explained later below.

Table 5.2
24 Key Concepts and Principles Derived From the Pool of Critical Success Factors and Quality Management Practices
Source: Derived from Appendix B

1. Academic Quality is the means for achieving and sustaining Academic Excellence. Academic Quality and Excellence must be defined in terms of Teaching, Learning, Scholarship and Research; and benchmarked against Local, Regional, National, and International levels of Quality and Excellence [code: 1.1.1; 1.1.2; 1.2.2]

2. Personal and Institutional Visions, Values and Beliefs must be integrated and must underpin Institutional Mission; and Personal and Institutional Values must relate to issues of Diversity, Equality, Life-long Learning, the creation of a Learning Society and a Knowledge Economy [codes: 1.2.1; 1.3.1; 1.3.2; 20.2.2; 21.1.2; 23.1.1; 23.1.2]

3. Continuous Improvement as the vehicle for achieving an optimal balance between Intellectual Freedom and institutional Autonomy on one hand; and Accountability through Value for Money on the other hand [codes: 1.4.1; 1.4.2]

4. Deployment of Academic, Administrative, and Support-service Quality Improvement Policy and Strategy relating to regular maintenance and increased investment in Teaching and Research Infrastructure – including ICT infrastructure [codes: 2.1.1; 2.1.2; 2.1.3; 2.2.2; 4.1.2; 8.2.2; 12.1.4; 16.2.1; 27.2.1]

5. An Integrated Management Information and Marketing Intelligence System for capturing feedback from staff, students and other stakeholders; requiring a dedicated Marketing Department leading communication of Brand and Reputation [codes: 2.1.4; 2.2.2; 2.2.3; 2.2.4; 3.2.3; 7.2.3; 7.4.2; 8.1.1]

6. Involvement of Teaching and Research Staff in Policy and Strategy formulation; and in setting Quality Improvement Objectives and Targets for their areas of responsibility in order to gain their trust and commitment [codes: 3.1.2; 3.2.2; 6.2.2; 9.1.1; 21.1.1; 21.2.1; 21.2.2]

7. Chancellery, Deanery, Heads of Department, and Quality Managers must be able to defend levels of funding in support of Teaching and Research Quality Improvement initiatives. Staff Development Budgetary Systems should be de-centralised to ensure strong Budgetary Support for Teaching and Research Quality Improvement Initiatives. Staff Training and Development needs to include Leadership Training and Professional Development [codes: 3.1.1; 3.1.3; 3.1.4; 3.2.1; 4.1.1; 4.3.1; 4.3.2; 5.2.1; 5.2.2; 5.3.1; 8.1.2; 9.2.1; 10.1.2; 13.1.3; 16.2.2; 28.2.1; 28.2.2]

8. Implementing Strategies for Handling Staff-Student Complaints about Teaching and Learning Styles and Facilities in order to maximise the benefits derived from Individual and Team Contributions to overall Quality Improvement Effort [codes: 3.2.4; 4.1.3; 4.2.1; 4.2.2; 4.2.3]

9. Teaching and Research Quality Improvement Policies should be properly synthesized from Principles and Values; and explicitly stated. This will ensure that tasks and activities making up a 'Process' are well defined, and timely achievement of expected levels of Quality Improvement, and that Staff Retention Strategy results in reduction in Staff Turnover and Staff-student Ratio [codes: 5.1.1; 5.1.2; 5.2.3; 5.3.2; 6.1.1; 7.3.1; 8.1.3]

10. Job Descriptions should clearly define the responsibility of individual Teaching and Research Staff, and their responsibilities in a Group situation to prevent duplication of the actual work done. Job Specifications should effectively matched individual ability and skills with tasks to be performed [codes: 6.1.1; 6.1.2; 25.1.1; 25.2.1]

11. Process Performance needs to be measured as accurately as possible; and resource allocation for process improvement should be based on the requirements of internal and external customers and suppliers [codes: 6.2.1; 6.2.3]

12. There is an urgent need for Data, Information, Intelligence, and Knowledge Management Policy and Strategy for collecting accurate, up-to-date data from multiple sources, for

effective storage, and retrieval on time, for processing into relevant information for decision-making [codes: 7.1.1; 7.1.2; 7.2.1; 7.2.2; 7.4.1]

13. Effective integration of academic, administration, and support-service functions; and implementation of an integrated system for Staff Performance Appraisal, Performance Management, and Performance-related Rewards [codes: 8.2.1; 9.1.2; 9.1.3; 9.2.2; 10.1.1; 10.2.1; 10.2.2; 10.3.1; 10.3.2; 12.1.5; 15.2.2; 22.1.1; 22.1.2; 22.1.3; 22.2.1; 22.2.2; 22.2.3]

14. Implementation of deliberate strategies for creating synergies for efficient resource allocation, and reducing the cost of bureaucracy [codes: 11.1.1; 11.1.2; 11.2.1; 28.1.2]

15. Ability of academics and administrators to effectively manage interfaces between academic and non-academic activities; teaching and research; and scholarship and research, including their ability to critique publications as basis for improving Research Outputs [codes: 11.2.2; 12.1.3]

16. Providing adequate Learning Facilities for Students with Disabilities and helping Students adopt deep-learning techniques [codes: 12.1.1; 12.1.2; 17.1.1; 17.1.2; 17.2.1; 17.2.2; 17.2.3; 20.1.1]

17. Collaboration with Further and other Higher Education Educational Institutions; Governments – including the QAA and HEFCE; and other local, regional, national and international Public Sector organisations. Partnerships with local, regional, national, and international Private Sector Organisations in support of Masters, Doctoral, Post-doctoral Programmes and Professorships in Applied Research [codes: 12.2.1; 12.2.2; 24.2.2; 28.2.1]

18. Justification of Strategic Quality Improvement Plans based on Institutional and Departmental priorities, and realistic achievable goals and objectives relating to Teaching and Research. Rationalisation based on Teaching and Research priorities and Cost-Benefit Analysis [codes: 13.1.2; 13.2.1; 28.2.2]

19. Implementation of an Open Bidding Process for Funds under explicit conditions. Budget Centres should comprise of Cost Units, Revenue Units, and Profit Units - working as a Team. Adoption of Activity-based Costing for Costing Teaching and Research Quality Improvement Activities and effective control of Teaching and Research Overheads [codes: 13.2.2; 13.3.1; 13.3.2]

20. Process Design and Re-design should be based on thorough understanding of the nature of tasks and activities making up a process, after an acceptable period of documentation of practice. There should be a systematic base for identifying, evaluating and selecting tasks and activities with the required characteristic features to enhance process performance before key teaching and research processes are designed or redesigned [codes: 14.1.1; 14.1.2; 14.2.1; 14.2.2; 15.1.1; 15.1.2; 15.2.1]

21. Less frequent restructuring to prevent frequent changes in Leadership and Policy and Strategy at all levels of the management [codes: 16.1.1; 16.2.1; 19.2.2; 20.2.1]

22. Incorporating Results from Students Satisfaction Surveys into improvement Policy and Strategy on timely basis in order to take advantage of opportunities to improve on weak quality improvement practices [codes: 18.1.1; 18.1.2; 18.2.1; 18.2.2; 19.1.2; 19.1.3; 20.1.2; 27.2.2]

23. Maintaining an excellent working relationship with External Stakeholders - in particular the QAA and HEFCE – in order to meet the requirements of Students and Staff with Disabilities. Implementation of deliberate strategies for dealing with the impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduates; Staff Teaching Practices and Staff Morale [codes: 23.2.1; 23.2.2; 24.1.1; 24.1.2; 24.2.1]

24. Using a comprehensive and balanced set of Financial and Non-financial Performance Measures [codes: 26.1.1; 26.1.2; 26.1.3; 26.2.1; 26.2.2; 26.2.3; 26.3.4; 27.1.1; 27.1.2; 27.2.1; 28.1.1; 28.2.2]

The inductive theory will therefore, comprise of three main components, first, the empirical results from analysing the evaluation scores. Second, the fundamental concepts and principles derived from the pool of critical success factors and best practices associated with them; and third, the philosophical and empirical assumptions intended to hold the CSFs and best practices together into a coherent theory derived from practice. It is based on the belief that there is a cyclical relationship between 'empiricism' and 'philosophy', and between 'induction' and 'deduction', and on the assumption that 'practice' informs 'theory' and vice versa.

B. The Philosophical and Empirical Assumptions underpinning the Construction of the Inductive Theory for Model Development – Emanating from Empirically derived Academic Quality Management Concepts and Principles

The relationship between 'practice' and 'theory' is an issue that has been vigorously debated by academics and practitioners for many centuries (Easterby-Smith et al., 2003:27). This section outlines 16 fundamental philosophical and empirical 'assumptions' stemming from the 24 Key Concepts and Principles in Table 5.2 above. These assumptions do not ascribe to all aspects of positivism or constructionism, but adopts a pragmatist's and/or critical realist's perspective, by deliberately adopting relevant ontological and epistemological assumptions drawn from both extreme traditions. It originates from the view that, the nature of 'reality' and 'knowledge', prevailing in a higher education setting is not simply exterior and objective, but also constructed and given meaning by those who work for and within higher education institutions. There follows from this view, two very important methodological implications:

- *First, the explanations offered by this researcher demonstrates largely probabilistic causality rather than deterministic causality; aimed at increasing understanding of the actual situation prevailing in the UK higher education institutions, regarding academic quality management practices;*
- *Second, concepts and principles derived from the Pool of CSFs and Best Practices incorporate Stakeholder Perceptions, which provide a holistic view of the complexity of the situation in academia.*

The 16 assumptions outlined below - with brief explanation - are elaborated upon later in this chapter in the development of the Academic Quality Management Model.

1. Implementation of Formal hierarchical structures represented by Charts showing authorized vertical relationships between members of the institution, to ensure that a stable foundation exist to encourage development of informal complementary structures. It offers a mechanism for distributed leadership through sharing of power, influence, and control to ensure sustainable levels of authority and accountability to both internal and external Stakeholders.

2. Implementation of Rational, Proactive, Top-down and Bottom-Up, Decision-making Processes at all levels for deciding, agreeing, and achieving departmental and institutional Teaching and Research Quality Improvement objectives and targets; based on objectively, independence, and individual intellectual capacity.

3. Recognition of the whole Institution as a system, with schools, departments, programmes, academic and non-academic activities, staff, students, and other employees as sub-systems or subunits systematically linked together. Encouraging individuals and interest groups to compete to get what they want in the face of scarce resources.

4. Recognition of the whole Institution as a Goal-seeking organisation, with official Mission, Vision, Values, Principles, Strategies, Objectives and Targets; which needs to be harmonised with the personal goals of academic and non-academic Staff, to ensure goal congruence; as part of an overall strategy for minimising conflict.

5. Authority, power, control, influence over other staff should be essentially a product of formal position and roles; and held only while in that senior position; to prevent psychological and physical abuse of power.

6. Accountability to be directly linked to Centralised and/or Decentralised positional authority; and promotion of shared Responsibility in Group Situations.

7. Power Sharing and Staff Participation in Decision-making Processes should be encouraged among Staff with a shared understanding about institutional aims.

8. A Proactive Process of Discussion leading to consensus should be implemented, in the determination of Policy and Decision-making; in particular during crisis situation when Teaching and Research Funding and other Resources are expected to be scarce.

9. Academic, Administrative, Support-service Staff at all levels should be encouraged to confer and collaborate with each other on formal and informal bases to strengthen formal hierarchical structures.

10. Implementation of Teaching and Research Quality Improvement Policies and Strategies, through adoption of flexible, less stressful approaches based on less prescriptive or normative views about 'what ought to be', and more on 'what is' derived from empirical research into Teaching, Learning, Scholarship and Research Best Practices.

11. Continuous Enhancement of professional and positional authority through alignment of individual expertise with institutional objectives.

12. Were possible shared Vision, shared Values, Beliefs and Principles, should be promoted; in particular through socialization during Staff Training and early years of Professional Practice in order to guide Teaching and Research activities towards achievement of expected quality improvement objectives and targets. Members of Quality Improvement Teams should be encouraged to personally and actively participate in the decision-making process; and in Sharing Data, Information, Intelligence and Knowledge about Best Teaching and Research Quality Improvement and Management Practices.

13. Teaching and Research Quality Improvement Decisions relating to setting Targets should be reached through participation of key internal and external stakeholders in order to reduce conflicts and divisions. In support of the belief that Shared Values should result in Shared Objectives, Shared Power, Shared Influence, Shared Contributions, Shared Benefits, and Shared Risks.

14. Policy and Decisions should emerge through a process of negotiation and bargaining; allowing interest groups to develop and form alliances in pursuit of particular policy objective

- in recognition that conflict is a natural phenomenon and power accrues to dominant coalitions rather than being the preserve of formal leaders.

15. Ensuring that Teaching and Research Staffs' subjective and selective perceptions about departmental and institutional quality and performance are harmonised into a holistic framework of perception measures, which encapsulates the Mission, Vision, Values and Principles of the Institution – to ensure goal congruence.

16. A recognition that the best possible way to deal with the increasing turbulence and unpredictability in UK higher education environment – with particular reference to Funding Allocations – is to ensure that short-term Quality Improvement Planning activities roll over into a coherent long-term Quality Improvement Plans. This will ensure that, time, scarce funds, and other resources for teaching and research are not wasted in the pursuit of ambiguous objectives; and allow for effective management of risk and uncertainty.

The above mix of philosophical and empirical assumptions may be described as being 'holistic' because it brings together different perspectives of academic quality management, and reflects on the complexity in UK higher education industry, by using critical success factors from internal, external and competitive environment in which HEIs operate. Critical success factors represent important features of higher education institutions and are therefore able to delineate the intricacies of decision processes in complex organisations such as universities and colleges of higher education. The use of CSFs provides a rational justification in attempting to develop an all-encompassing contextual model for academic quality improvement and management in higher education institutions in the United Kingdom.

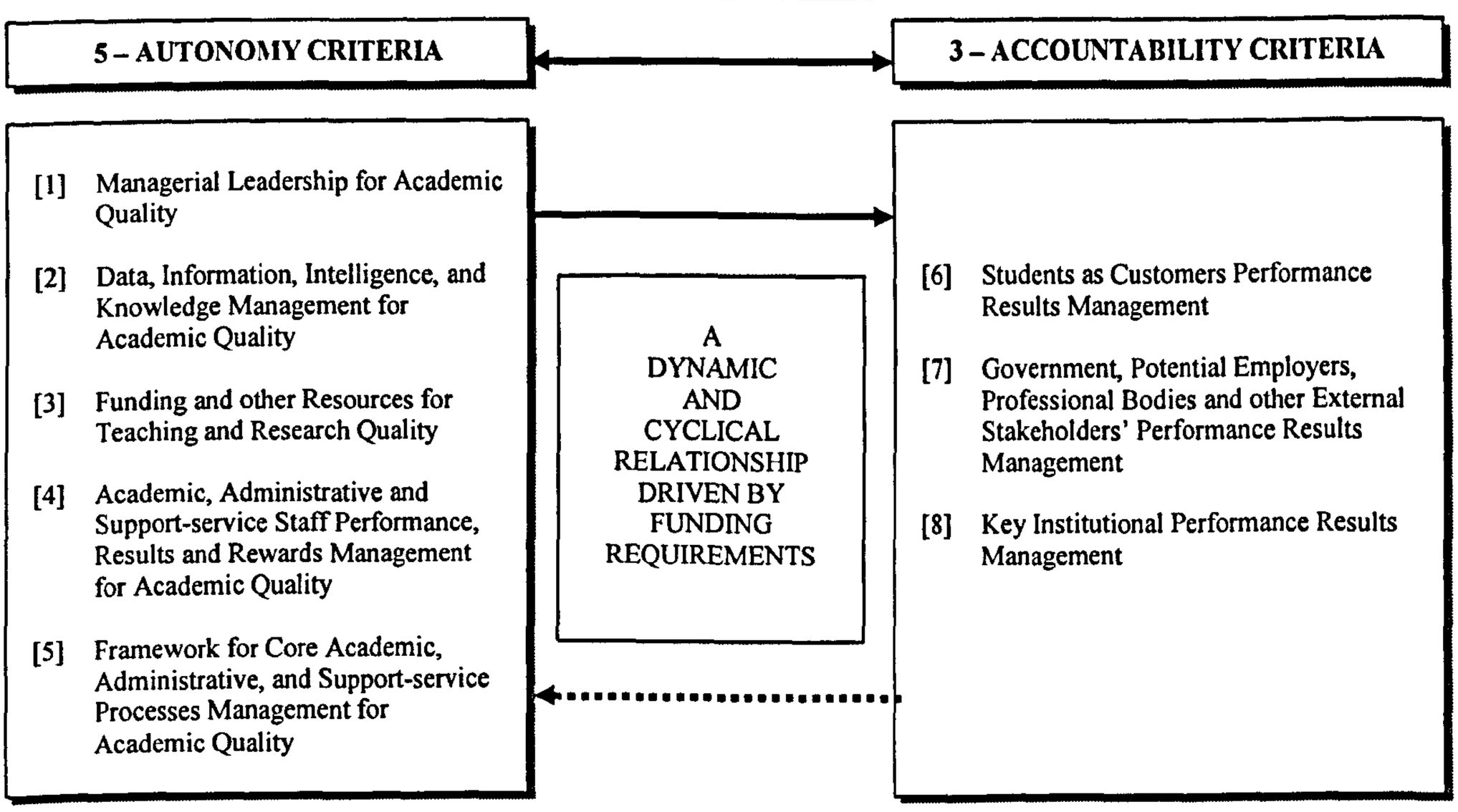
C. Statement of Theory and Definition of Terms of Reference

The 'statement of theory' for academic quality management will comprise of key definitions followed by description of the relationships between critical success factors and associated best practices - the definitions and descriptive account of will be made under two sub-headings below. First, preserving institutional *autonomy* and intellectual freedoms, which reflects on the established relationships between the critical success factors and best practices relating to the 'autonomy' criteria. Second, *accountability* to stakeholders, which reflects on the established relationships between the critical success factors and best practices relating to the 'accountability' criteria. The 'autonomy' and 'accountability' criteria depict the two arms of a weighing or balancing device representing the long-term interests of higher education institutions on one hand, and of external stakeholders on the other hand. Each statement of theory will reflect on all or some of the philosophical and empirical assumptions outline above.

Preserving Institutional Autonomy and Intellectual Freedoms

The empirical evidence in this doctoral research study suggest that, the preservation of institutional 'autonomy' and of 'intellectual freedoms' is the single most important driver for the creation of knowledge and the transmission of knowledge required to create a learning society and a knowledge-based economy. Higher education institutions 'produce' and 'sell' 'knowledge' as a commodity with an economic value. This requires academic staff working as researchers to create or produce 'knowledge'; and as teachers to transmit or sell knowledge to students, potential employers, for growth in the economy, and for the well being of society as a whole. The creation of the 'enabling' environment for sustaining a culture for academic – through continuous academic quality improvement – is therefore prerequisite to any other stakeholders' demands. In order to create and sustain this enabling environment, this doctoral research study identified 'five' autonomy or enabler criteria, which deals with the 'supply-side' of achieving academic excellence (see Figure 5.2 below).

Figure 5.2
Osseo-Asare's Autonomy-Accountability Criteria for Sustaining Academic Quality for Academic Excellence
Source: Osseo-Asare Jr. 2003



These are linked to three 'accountability' or results criteria – which examines the 'demand-side' of academic excellence. The 'supply-side' of academic excellence represents the 'means' for meeting the 'ends' or the 'demand-side' of academic excellence. From Figure 5.2 above, we can see that, the relationship between the two sides is 'dynamic', 'cyclical', and driven by 'continuous' flow of funding for teaching

and research quality improvement. Funding is therefore the 'life-blood' for sustaining 'continuous' teaching and research quality improvement in UK HEIs. These two sides of the 'inductive theory and model will be explained in detail later in this chapter.

Managerial Leadership for Academic Quality:

Teaching and Research Quality Managers and Leaders need to have a clear sense of strategic and operational direction and purpose, informed by the Mission, Vision, and Value Statements relating to Teaching, Learning, Scholarship, and Research Quality Improvement and Management, which they communicate efficiently and effectively throughout the higher education institution.

Data, Information, Intelligence, Knowledge Management for Academic Quality:

Teaching and research quality improvement activities should be managed through a framework of core processes. Process management must be based on accurate, reliable, quantitative and qualitative empirical data collected on ad hoc and continuous basis. Multiple sources ought to be used to provide relevant and timely information. The intelligence on how to gain and sustaining competitive advantage should form the basis for knowledge management. Knowledge should be gained from learning experiences – in a systematic and effective way, taking into account the needs and expectations of students, government, potential employers, professional bodies, academic and non-academic staff, and of the institution itself. Relevant data, information, intelligence, and knowledge on weak, good, and best academic practices must be internally transferred to maximise teaching and research quality assessment performance results, and to promote continuous learning, innovation and improvement.

Funding and other Resources for Teaching and Research Quality:

Funding underpins other resources for Teaching and Research. There is an urgent need for funding from diversified sources, to carry out regular maintenance on and to increase investment in Teaching and Research Infrastructure. This requires extensive diversification of sources of funding through mutually beneficial collaboration and partnership relationships with identifiable internal and external stakeholders. It should include active participation of teaching and research staff and other employees, students, suppliers, the government and local authorities, society and the local, national, and international communities. The aim is to enable the institution to meet its short-term and long-term financial obligations in relation to meeting the needs and exceeding the expectations of both internal and external stakeholders – in a deliberate and balanced manner.

Academic, Administrative, and Support-service Staff Performance, Results and Rewards Management for Academic Quality:

The ability of institutions to create and sustain a 'culture' for Academic Excellence, depends on the ability of individual teaching and research staff in management and leadership position, to motivate, encourage, support, empower, trust, and reward individual and group performance. A culture for academic excellence is required in order to maximise benefits derived from intellectual freedoms, to enable all categories of staff to develop their personal interest and objectives with those of the departments they work in and of the institution as a whole. It requires a clear understanding of the needs of both current and potential students and of other customers; and a passion for meeting staff needs, institutional needs, and the needs of the Government, and other external Stakeholders.

Framework of Core Academic, Administrative, and Support-service Process Management for Academic Quality

The approach to managing Academic Quality improvement must be by 'process' – comprising of defined tasks and activities known to deliver superior performance results for internal and external stakeholders. The selection of the tasks and activities in the design of new processes must be based on a systematic approach to evaluation in terms of their relative importance and effectiveness to deliver expected improvement results, based on facts derived from reliable data, information, intelligence, and knowledge of the needs of students and other stakeholders. It should therefore be possible to abandon 'processes', which are simply not working, and to introduce new processes that are known to work – through process benchmarking initiatives.

The three 'accountability' criteria shown in Figure 5.2 above: [6] students performance results; [7] Government, Potential Employers, and other External Stakeholders' Performance Results Management; and [8] Key Institutional Performance Results Management, are briefly described below, and later in detail in this chapter.

Accountability to Internal and External Stakeholders

The concepts and principles of Strategic Marketing Management suggest that, the best possible way to ensure that the needs of stakeholders are met and their expectations exceeded on a continuous basis; is for HEIs to become marketing oriented. It requires HEIs to become customer focused by showing leadership and constancy of purpose in their drive to satisfy internal and external stakeholders.

Students as Customer Performance Results Management:

Students as customers, is now a universally accepted categorisation. This certainty is required in order to plan academic quality improvement activities more deliberately and cost-effectively. In order to meet the short-term financial obligations of departments and schools, there is the need to ensure that priority is given to students who pay all their tuition fees prior to commencement of their studies; followed by those who have paid at least 50% of the tuition fees, with a high degree of certainty that the remaining amount will be settled by the end of the first semester; all other modes of payments should come under a third category – this allows for prudence in the management of cash balances.

Government, Potential Employers, Professional Bodies, and other External Stakeholders' Performance Results Management:

The strategic role of the Government, as the funder of last resort is steadily declining, a certainty which institutions must take on board in order to be more proactive in planning their funding outlay for sustained planned maintenance and increased investment in teaching and research infrastructure. The uncertainty about not knowing where the funds will come from must give way to a more robust interaction with external and internal stakeholders in order to acquire the necessary funds for improvement. The 'blame it on lack of funding' attitude of leadership, must give way to aggressive interaction with society – based on 'do-it-yourself' mindset – to finding alternative means for creating and sustaining the culture for academic excellence.

Key Institutional Performance Results Management:

Accountability to 'external' stakeholders must be balanced by accountability to 'internal' stakeholders. The assessment of performance should be in terms of a balanced mix of financial and non-financial performance measures. This requires leadership 'tact' and 'sensitivity' in matching 'means' and 'ends'. The 'catch-phrase' should be 'cautious optimism'; with a balanced focus on stakeholders' needs, in order to sustain optimal levels of Teaching and Research quality improvement – far removed from the 'game-playing', rhetoric, internal politics, and daily struggle for position and power.

The above statements of theory and definitions of the terms of reference will be applied below, in the development of alternative strategies for closing the 'perceptions gaps' relating to the degree of 'importance' and the degree of 'effectiveness' of the quality management practices evaluated in this research study.

D. A Framework for Closing Perception Gaps - Notion of Best Practice Gaps

The erratic patterns observed in Graphs 4.1 to 4.6 are partly explained by the fact that, the 42 respondents in this research study gave different evaluation scores for each practice. It suggests that, there are different ways of looking at teaching and research quality management and leadership related problems in UK higher education institutions. It offers an explanation for the existence of many alternative Quality or Excellence models in higher education. Professor Tony Bush in his book titled *Theories of Educational Leadership and Management*, argued that, each alternative model can only offer valuable insights into the nature of management and leadership in higher education, with none providing a complete picture (Bush, 2003:33, 178-179). The model developed in this thesis adds to the growing number of alternative models, and specifically addresses different aspects of quality management and leadership approaches required to sustain teaching and research quality improvement for academic excellence.

It may be argued that, each respondent gave a valid assessment of the quality management practices in their respective institutions, based on the assumption that, the relevance of each evaluation score varies according to the context. That is to say meaning is grounded in respondents' own interpretation of their situation - this assumption is consistent with the notion of *interpretivism* or constructivism. This is one of the justifications for adopting an inductive approach to data collection, analysis, and interpretation. It suggests that, meaning is grounded in the empirical results, rather than imposed on the basis of an existing theory. Rather than risk failure, many so-called excellence models including the MBNQA, the EFQM, and Kanji Business Excellence models, do not explicitly admit that, there is no single model capable of presenting a total framework for our understanding of what goes on in HEIs. A point eloquently put across by Bush (2003:178) and Baldridge et al (1978:28) in the statements below:

"Each event, situation or problem may be understood by using one or more of these (alternative) models but no organisation can be explained by using only a single approach." (Bush, 2003:178)

"The search for an all-encompassing model is...not bad except when we allow our models to blind us to important features of the organisation." (Baldridge et al., 1978:28)

The Notion of Best Practice Gaps (BPGs)

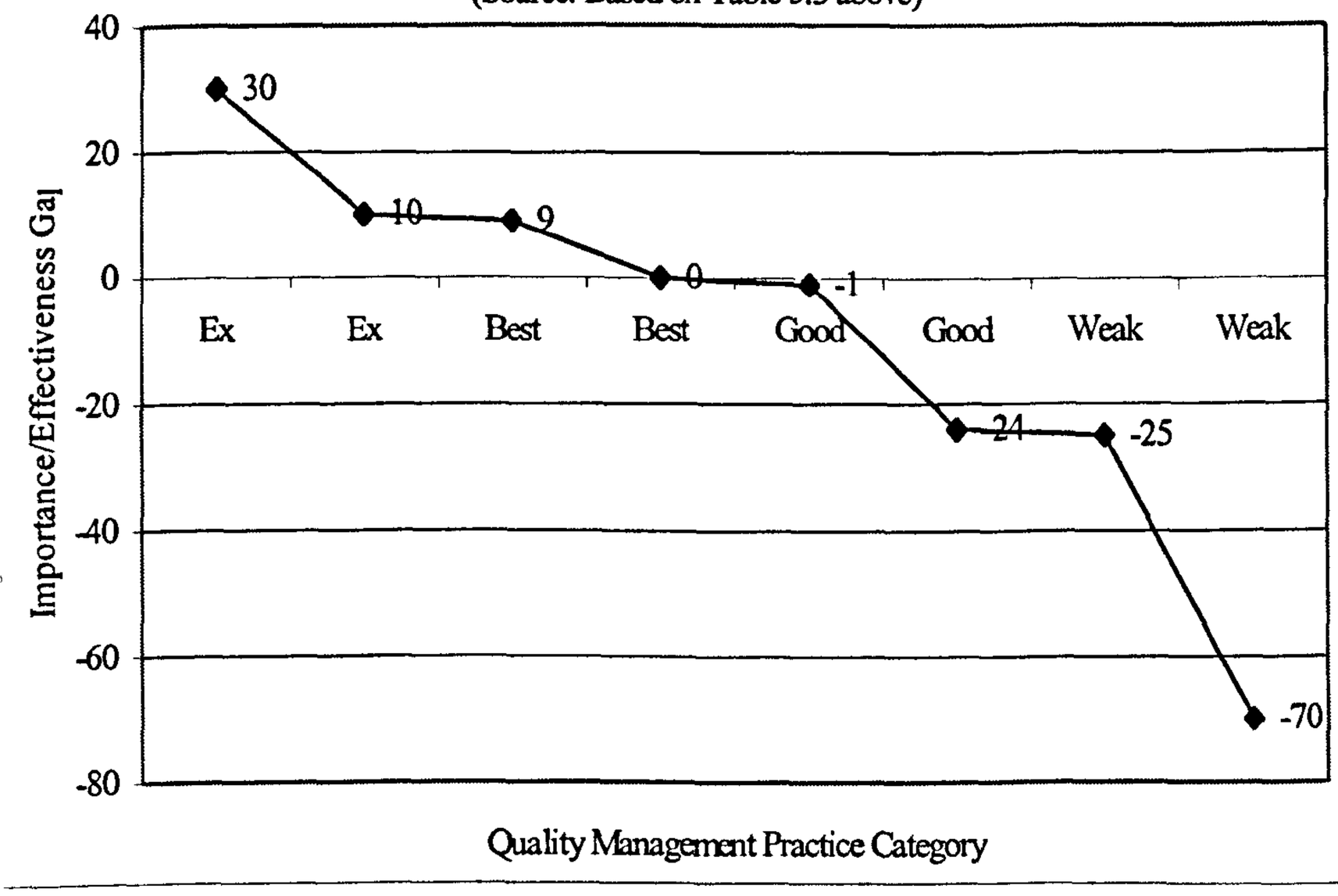
The notion of Best Practice Gap (BPG) was introduced in this study to explain the strategic implication of the relative importance scores (RISs) and the relative effectiveness score (RESs) for each of the 28 quality management practices evaluated in this thesis. Table 5.3 and Graph 5.1 below show the data set and corresponding plot of the 'importance' and 'effectiveness' gaps based on Osseo-Asare's Scoring Mechanism. The plot represents a 'standard' curve for defining the boundaries of 'weak', 'good', 'best', and 'excellent' practices.

Table 5.3
Defining the Boundaries of Best Practice and of Excellent Practice
Source: Osseo-Asare Jr. 2003

UL = Upper Limit Score; LL = Lower Limit Score; Minimum Best Practice Score as per Scoring Mechanism = 70%

Practice Category	STANDARD DIFFERENCE [Upper Limit - 70%] OR [Lower Limit - 70%]	STANDARD VALUE FOR BPG - CURVE
Excellent Practice UL = 100; LL = 80	100 - 70	+ 30
	80 - 70	+ 10
Best Practice UL = 79; LL = 70	79 - 70	+ 9
	70 - 70	0
Good Practice UL = 69; LL = 46	69 - 70	- 1
	46 - 70	- 24
Weak Practice UL = 45; LL = 0	45 - 70	- 25
	0 - 70	- 70

Graph 5.1
Standard Curve for Best Practice Gap
(Source: Based on Table 5.3 above)



From Graph 5.1 above we can see that, moving horizontally from the 'left-hand-side' to the 'right-hand-side' of the graph, corresponds to moving from an 'excellent practice' zone to a 'weak practice' zone, through 'best' and 'good' practice zones. We can also see that:

- *BPGs with POSITIVE values are all ABOVE the ZERO-LINE; and*
- *BPGs with NEGATIVE values are all BELOW the ZERO-LINE.*

However, moving vertically from 'top' to 'bottom' of the Graph shows that:

- *Best Practices and Excellent Practices are represented by POSITIVE BPG Values between [0 - 30%]; more specifically, Best Practices have POSITIVE BPG Values between [0-9%], and Excellent Practices have POSITIVE BPG Value of [10-30%];*
- *On the other hand, Good and Weak Practices are represented by NEGATIVE BPG Values between [1-70%]; more specifically, Good Practices have NEGATIVE BPG Values between 1% and 24%; and Weak Practices have NEGATIVE BPG Values between 25% and 70%.*

This is strategically important in determining the direction of management 'efficiency' and leadership 'effectiveness', in the sense that, a POSITIVE BPG value indicates 'efficiency' and 'effectiveness' levels are satisfactory i.e. performance results lie in the best and excellent practice Zones. The alternative strategies will be either to:

- *SUSTAIN current quality management practices, because they are delivering satisfactory performance results, or*
- *IMPROVE upon the current practices in order to sustain 'competitive advantage'.*

Similarly, a NEGATIVE BPG value indicates levels of 'efficiency' and 'effectiveness' are not satisfactory and efforts need to be made to either:

- *IMPROVE upon or*
- *ABANDON current quality management practices altogether; and/or introduce*
- *NEW quality management practices identified through internal and/or competitive Benchmarking Projects.*

At this stage an example from Table 4.2 will help explain the usefulness of the Standard BPG Curve in Graph 5.1. Leadership Practice #1 has a relative importance

score (RIS) of 79%, which corresponds to a 'positive' BPG (importance) value of 9%. Similarly, the associated relative effectiveness score (RES) of 71%; also corresponds to a 'positive' BPG (effectiveness) value of 1% - it shows the levels of 'efficiency' and 'effectiveness' are within the 'satisfactory zone' - specifically located in the Best Practice Zone above the ZERO-Line in Graph 5.1. The strategic implications of these results are explained below for each *autonomy* and *accountability* criterion.

5.1.2. Using the Theory Created as Basis for Improving the Efficiency and Effectiveness of Autonomy and Accountability Criteria

As already explained in Chapter One, the works of Mullins (1999:233) and Bennis and Nannus (1985) suggest there is a functional relationship between managerial efficiency and leadership effectiveness. The association between the degree of 'importance' and the degree of 'efficiency' is based on the assumption that both relate to input resources availability, allocation and utilisation, and on a quality managers' ability to prioritise improvement activities and objectives when faced with scarce resources situations. Degree of 'importance' as used in this research study is therefore about quality managers' decision-making abilities relating to how they assess the criticality of different critical success factors, and decide the rankings of these factors - in order to effectively achieve predetermined performance improvement objectives. This implies that:

- *'Importance Gaps' represent 'managerial efficiency gaps' - one of two root causes of teaching and research quality gap;*
- *'Effectiveness gaps' are 'leadership effectiveness gaps', assuming the concepts of management and leadership are inseparable - it is the second of the two root causes of teaching and research quality gap.*

A gap in relative 'importance' coupled with a gap in relative 'effectiveness' of a quality management practice, therefore represent a measure of academic quality gaps (AQG). AQG therefore comprises of two gaps, first the 'efficiency gap' measured in terms of BPG (importance), and second, the 'effectiveness gap measured in terms of BPG (effectiveness). For example, Leadership Practice #1, has BPG (importance) = +9% and BPG (effectiveness) = +1%, resulting in the AQG-value of 10% i.e. AQG = 9 + 1 = +10%, which is located in the satisfactory managerial performance results zone above the ZERO-LINE in Graph 5.1.

A. Improving the Efficiency and Effectiveness of 'Autonomy' Criteria

This sub-section shows how the theory created can be used to bring about improvement in quality management practices relating to autonomy criteria. How to improve the efficiency and effectiveness of accountability criteria is examined later under sub-section B. The following 'five' autonomy criteria are considered below:

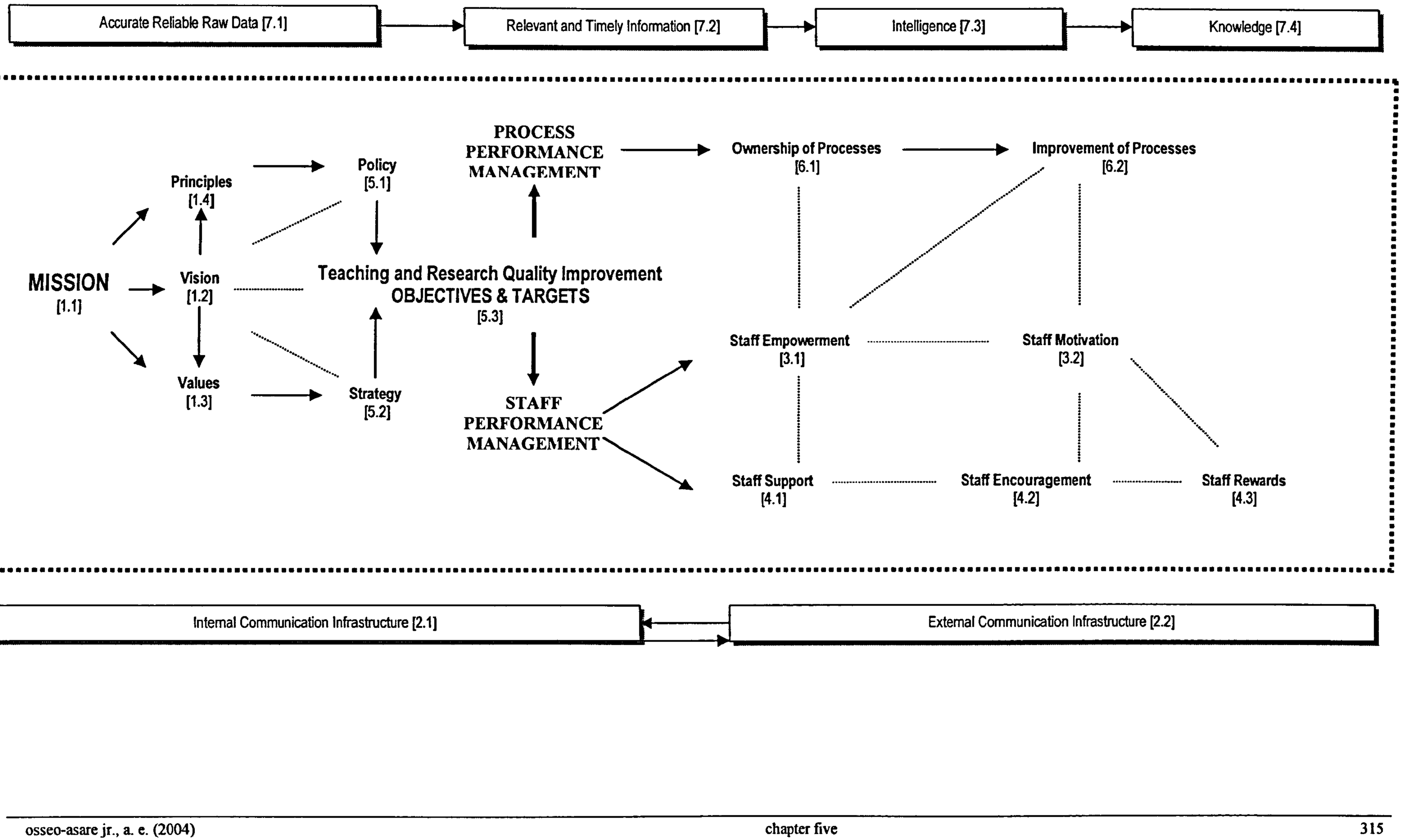
(1) managerial leadership; (2) data, information, intelligence, knowledge; (3) Funding and resources; (4) staff management; and (5) framework of core processes.

Managerial Leadership for Increased Efficiency and Effectiveness

The assumptions outlined earlier suggest that in order to achieve the primary objective of developing a *holistic* and *integrated* model, there is a need to develop a *holistic* definition of 'leadership' - derived inductively from the 24 concepts and principles shown in Table 5.2. Appendix C3b and Figure 5.3 below identifies 20 secondary CSFs associated with 'leadership', which represent, 20 dimensions of 'managerial leadership' in a higher education. It further extends the work of Professor Tony Bush, who in an earlier work identified 'three' dimensions of 'educational leadership': *Vision*, *Values*, and *Influence*, as basis for developing a working definition of leadership (Bush, 2003:5). It also extends further, the definition of 'organisational leadership', offered by the EFQM Excellence Model, which is expressed in terms of 'four' dimensions: *Mission, Vision, Values,* and management *Systems.* By comparison we can see that, Bush's (2003) '3-dimensional' and EFQM's '4-dimensional' definitions are incorporated into the all-embracing definition developed in this thesis - comprising of the 20 dimensions listed above. In the multi-dimensional framework for academic leadership shown in Figure 5.3, the 'arrows' represent associations between dimensions, and the 'dotted lines' associations, moving in one direction or in both directions. The framework suggests that:

Mission underpins *Vision* through a probable causal relationship, and *Vision* needs to be explicitly expressed in terms of *Values* and *Principles*, as the base for formulating Teaching and Research Quality Improvement *Policy*, *Strategy*, *Objectives* and *Targets,* which needs to be effectively aligned simultaneously with *Staff* and *Process* Performance, through staff *ownership* of processes, *support*, *motivation*, *empowerment*, and *rewards*; and effectively communicated to both internal and external stakeholders to gain and sustain their commitment to improvement initiatives. The association between the various dimensions is to be strengthened by the use of reliable data, transformed into relevant information for decision-making and the development of sustainable competitive advantage through intelligence and knowledge accumulation overtime.

Figure 5.3
The 20 Dimensions of Managerial Leadership For Academic Quality Improvement and Management
Source: Osseo-Asare Jr. 2003



Holistic and Integrated Definition of Managerial Leadership

The work of Yukl (2002:4-5) and Bush (2003:5) suggest that a holistic and integrated definition of 'managerial leadership' in the context of higher education is rare, because 'leadership' practice is contextual, and there is no agreed definition; as such some definitions are more useful than others. The 4-dimensional definition of 'leadership' put forward by the European Foundation for Quality Management (EFQM) is expressed in terms of:

> *"How leadership facilitates the achievement of the **Mission** and **Vision**, develops **Values** required for long-term success and implements these via appropriate actions and behaviours, and are personally involved in ensuring the organisation's Management **System** is developed and implemented". (EFQM, 2003a)*

The self-explanatory, multi–dimensional definition of 'managerial leadership' developed in this study, for academic quality management is stated as follows:

> *Managerial Leadership for Academic Excellence is staff-centred and process-driven approach for integrating managerial 'efficiency' and the 'effectiveness' of leadership. It involves making explicit statements of the **MISSION** of the Higher Education Institution, with respect to Teaching, Learning, Research and Scholarship. It requires that **VISION** statements are explicit and underpinned by the Mission, and are based on a clear set of **VALUES**, beliefs and **PRINCIPLES**. It is about how the use of reliable **DATA** and relevant **INFORMATION**, **INTELLIGENCE** and **KNOWLEDGE** acquired over the years, inform **POLICY** and **STRATEGY**, leading to agreement on Teaching and Research Quality Improvement **OBJECTIVES** and Targets; which are subsequently effectively **COMMUNICATED** internally to Academic, Administrative, Support-service Staff, and other employees; and externally to Students, Customers, the Government, potential Employers, and other external Stakeholder groups; in order to cultivate, gain, and sustain their commitment, through personal and active involvement in timely acquisition and efficient allocation of Funding and other Teaching and Research Resources to dedicated **STAFF** and core **PROCESSES** known to deliver superior Students, Staff, Society, Government, Institutional and other Stakeholders Performance Results for sustaining Academic Excellence.*

The obvious advantage of this all-embracing working definition of 'managerial leadership' is that, it reflects the context of higher education in the United Kingdom, and incorporates the key features found in the various leadership and management models identified by the literature (see Table 5.4 below). In that sense, it is more specific than the general and brief definition provided by the EFQM Model. This definition is considered as being 'holistic' for two main reasons outlined below:

- *It is multi-dimensional in nature, comprising of 20 management and leadership dimensions – represented as secondary critical success factors, most of which are directly associated with each other (see Figure 5.3 above)*
- *It incorporates the key features of the 'six' management models and 'nine' leadership models described by Bush and Glover (2002) and later by Bush (2003:33), as viable alternatives to educational management and leadership.*

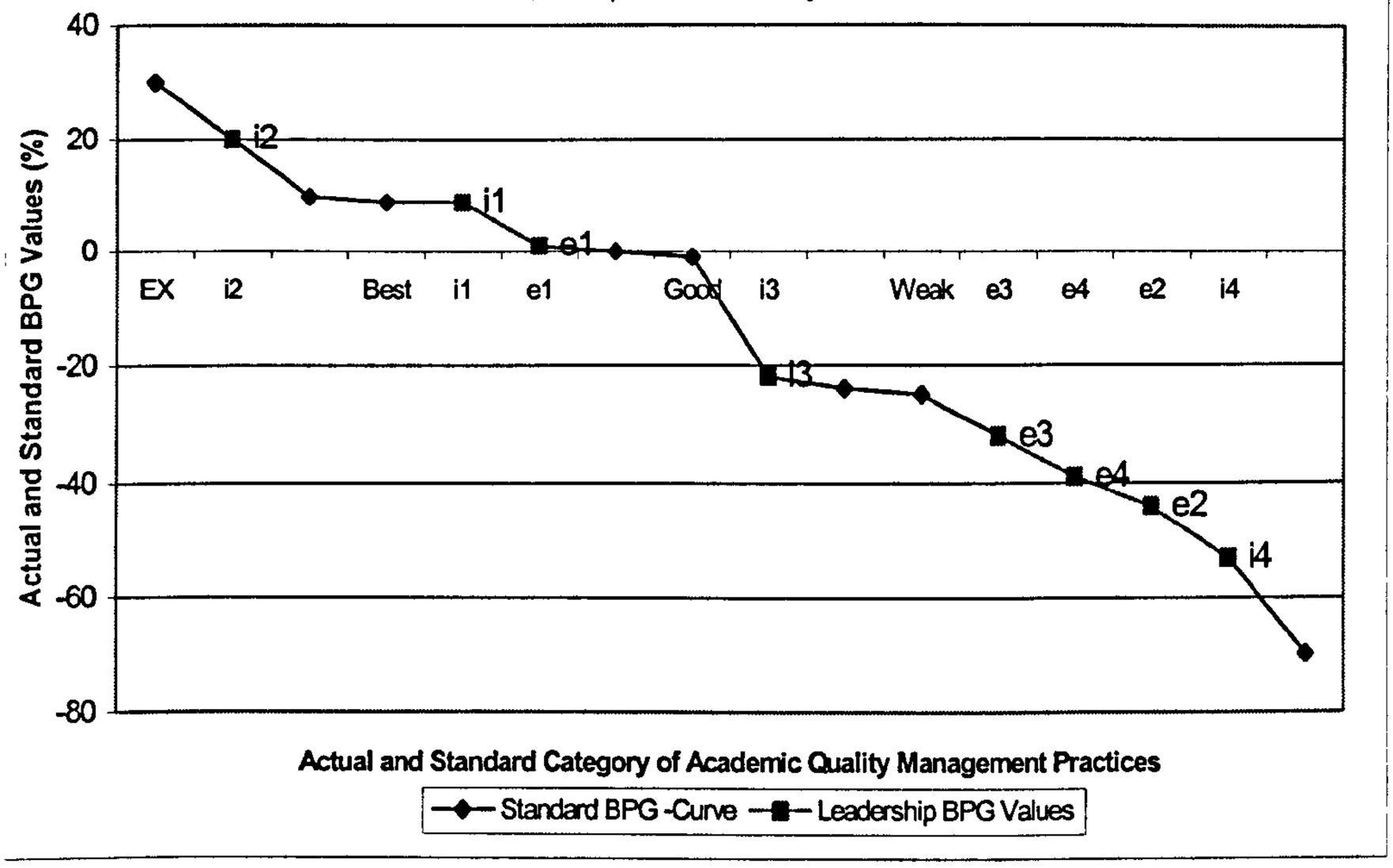
Table 5.4
The Holistic Nature of the Definition of Managerial Leadership for Academic Quality
Source: Osseo-Asare Jr. 2003

	Typology of Models By Bush (2003:33)		Osseo-Asare's Definition of Managerial Leadership for Higher Education
	Management Models	Leadership Models	
1	Formal Model	Managerial Model	Personal and Active Involvement in 'doing things right' i.e. Efficiency of Resources Allocation
2	Collegial Model	Participative Model	Encouraging personal and active Staff participating in formulating Teaching and Research Policy and Strategy, using available data, information, intelligence and knowledge; and participation in agreeing Teaching and Research Quality Improvement Objectives and Targets.
3	NO MATCH	Transformational Model	Leadership involvement in 'doing the right things' i.e. Effectiveness in achieving set Teaching and Research Quality Improvement Objectives and Targets, through effective Change Management Processes.
4	NO MATCH	Interpersonal Model	Acknowledging that leadership requires effective inter-personal skills in the management of Staff Performance Results, through Support, Encouragement, Rewards, Motivations, in an effort to meet Staff Needs and exceed their Expectations.
5	Political Model	Transactional Model	Acknowledging that every contact with 'students' as customers, the Government, potential Employers, Staff, and other internal and external Stakeholders offers an opportunity to do 'business', which requires professionalism and ethical behaviour.
6	Subjective Model	Post-Modern Model	Policy and Strategy needs to addressing issues of Diversity, and Widening Participation; and their impact on Entry Standards, Standards of Awards, Teaching and Learning Processes.
7	Ambiguity Model	Contingency Model	Recognition that critical success factors are not static, they keep changing, and efforts should be made to collect data, information, intelligence, and knowledge, on ad hoc and continuous basis. This will help identify the needs of stakeholders for more effective formulation of policy, strategy; and setting of SMART Teaching and Research Quality Improvement Objectives.
8	Cultural Model	Moral Model	Recognition that ethical behaviour is important for sustaining society performance results; and the local, national, and international reputation of the institution as a whole.
9	NO MATCH	Instructional	Positional authority should be used to provide Strategic Direction through Effective Communication to Subordinate Staff, based on accurate and reliable Data, Relevant and Timely Information, Intelligence for gaining competitive advantage, and knowledge; rather than for power-games, and management by misinformation.

Generating and Evaluating Alternative Strategies for Closing the Gaps in Managerial Efficiency and Leadership Effectiveness

As explained earlier, gaps in managerial 'efficiency' and leadership 'effectiveness' are expressed in terms of 'importance gap' and 'effectiveness gap' respectively. The gaps in 'importance' and 'effectiveness' are in turn measured in terms of 'Best Practice Gap (BPG) Values. The Best Practice Gap (BPG) values for the four Leadership Practices are plotted against the Standard BPG-Curve in Graph 5.2 below, to help generate alternative strategies for closing the gaps.

Graph 5.2
Identification of Areas for Improvement By Comparing Actual BPGs for Leadership Practices with the Standard BPG Curve
Source: Table 9.2 on Page 248- Leadership Practices: 1, 2, 3, 4
EX = Excellent; i = Importance =Effciency;, e = Effectiveness



The strategic relevance of the Standard BPG Curve is that, it enables Practices being evaluated to be immediately categorised into three groups: *Satisfactory* Practices (above the 'zero-line'); *Unsatisfactory* Practices (below the 'zero-line'); and *Boarder-line* Practices, which are neither 'satisfactory nor unsatisfactory' (on the zero-line).

The symbols used in Graph 5.2 are explained in Table 5.5 below. Graph 5.2, puts 'i1', which is the BPG (importance) Value of +9% for Leadership Practice #1 and 'i2' - the BPG (importance) Value of +20% for Leadership Practice #2 - firmly in the *satisfactory* or *positive-BPG* zone above the zero line where 'BEST' and 'EXCELLENT' practices are located.

Table 5.5
Understanding the Symbols Used
Source: Osseo-Asare Jr. 2003

Practices	i = importance gap = BPG (importance)	e = effectiveness gap = BPG (effectiveness)
Leadership Practices #1	i1	e1
Leadership Practices #2	i2	e2
Leadership Practices #3	i3	e3
Leadership Practices #4	i4	e4

However, 'i3' and 'i4' – the BPG (importance) Values for Leadership Practices #3 and #4 respectively can be found in the *unsatisfactory* or *negative-BPG* zone - below the zero line - where 'good' and 'weak' practices are located – because the values are negative. With the exception of 'e1' value, which is just above the zero line, 'e2', 'e3', and 'e4' values are 'negative' and therefore located below the zero line, in the *unsatisfactory* zone.

The strategic implication for assuming the philosophical stance of *pragmatism* and *critical realism* in this doctoral research study implies a pessimistic view is taken on the implications of these results, which confirm:

- *Leadership Practice #1 as a 'Best Practice' and the remaining*
- *Leadership Practices #2, Leadership Practice #3, and Leadership Practice #4 as 'Weak Practices', and suggest that, a number of alternative strategies for closing the perception gaps are needed.*

Generally, quality management practices with 'positive' BPG Values need to be 'sustained' or 'improved' upon. Whereas, practices with 'negative' BPG Values need to be 'improved', 'abandoned' or 'replaced' by 'new' Practices known to deliver superior performance results. For example:

- *Leadership Practice #1 needs to be 'sustained' and/or 'improved' upon; whereas*
- *Leadership Practices #2, Leadership Practice #3, and Leadership Practice #4 may have to be 'abandoned', 'improved'. It is also possible to 'introduce' new practices, identified through internal and competitive benchmarking processes.*

Tables 5.6 below, throws more light on the alternative courses of action for Leadership Practice #1, Leadership Practice #2, Leadership Practice #3, and Leadership Practice #4, respectively.

Table 5.6
Generating Alternative Strategies for Closing Best Practice Gaps for Leadership Practices #1, #2, #3, #4
Source: Osseo-Asare Jr., 2003

Table 5.6A – LEADERSHIP PRACTICE #1

	MANAGERIAL LEADERSHIP	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Leadership Practice#1 – MISSION, VISION, VALUES, PRINCIPLES **A BEST PRACTICE**	BPG Value is Positive i.e. +9%, which lies above the Zero-Line, in the Best Practice Zone. It means the general Level of Managerial Efficiency relating to this Practice is 'Satisfactory'. More specifically, the Managerial Efficiency is at a 'Best Practice' Level.	SUSTAIN Level of Managerial Efficiency at BPG = +9%; by maintaining the links between Mission, Vision, Values, and Principles. OR IMPROVE Managerial Efficiency. Strengthen the association between Mission, Vision, Values, and Principles – in order to raise the BPG Value from +9%	BPG Value is Positive i.e. +1%, which lies just above the Zero-Line, in the Best Practice Zone. It is too close to the 'Boarder-Line'. Urgent Action is required to prevent it from becoming a Weak Practice.	IMPROVE Level of Leadership Effectiveness upwards from BPG = +1%; through improved documentation and communication of Mission, Vision, Values, and Principles OR ABANDON the Practice if it is no longer Cost-Effective, and/or INTRODUCE NEW Practice

Table 5.6B – LEADERSHIP PRACTICE #2

	MANAGERIAL LEADERSHIP	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Leadership Practice #2 INTERNAL AND EXTERNAL COMMUNICATION INFRASTRUCTURE **A WEAK PRACTICE**	BPG Value is Positive i.e.+20%, which lies above the Zero-Line in the Excellent Practice Zone. It means the general Level of Managerial Efficiency relating to this Practice is 'Satisfactory'. More specifically, the Managerial Efficiency is at an 'Excellent Practice' Level – which may not represent an optimal result, and therefore cannot be sustained.	REDUCE Current Levels of Managerial Efficiency to OPTIMAL BPG Value for Efficiency; by identifying synergies in the use of Resources linked to Maintenance and Investment in Internal and External Communication Infrastructure	BPG Value is Negative i.e. – 44%, which lies below the Zero-line in the Weak Practice Zone.	IMPROVE level of Leadership Effectiveness, as a matter of urgency because of the large 'negative' BPG value; only if Practice has potential; by personal and active involvement in effective communication of Policy, Strategy, Objectives and Targets to ensure Cost-effectiveness of the Practice.

Table 5.6C – LEADERSHIP PRACTICE #3

	MANAGERIAL LEADERSHIP	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
3	Leadership Practice #3 STAFF EMPOWERMENT, MOTIVATION, LEADERSHIP. **A WEAK PRACTICE**	BPG Value is Negative i.e. –22%, which lies below the Zero-line towards the Lower-Boundary of the Good Practice Zone.	IMPROVE level of Leadership Efficiency, by personal and active involvement in Aligning Quality Improvement Policy, Strategy, Objectives and Targets to Staff Performance and Rewards.	BPG Value is Negative i.e. – 32%, which lies below the Zero-line in the Weak Practice Zone.	IMPROVE level of Leadership Effectiveness, as a matter of urgency because of the large 'negative' BPG value; only if Practice is Cost-effective with the potential of delivering superior Teaching and Research Quality Improvement Results; by increasing staff participation in key improvement decisions, and providing opportunities for professional development and leadership training.

Table 5.6D – LEADERSHIP PRACTICE #4

	MANAGERIAL LEADERSHIP	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
4	Leadership Practice #4 STAFF SUPPORT, ENCOURAGEMENT, REWARDS. **A WEAK PRACTICE**	BPG Values is Negative i.e. –53%, which lies below the Zero-line towards the Lower-Boundary of the Weak Practice Zone. This Very Poor Level of Managerial Efficiency; should not be allowed.	IMPROVE Managerial Efficiency through 'transformation' of Practice. OR ABANDON Practice. OR INTRODUCE New Practices	BPG Values is Negative i.e. – 39%, which lies below the Zero-Line in the Weak Practice Zone. This Poor Level of Leadership Effectiveness; should be improved as a matter of urgency.	IMPROVE Effectiveness, through personal and active involvement in supporting, encouraging and rewarding Academic, Administrative and Support-service Staff in their efforts to sustain continuous improvement in academic quality. OR ABANDON Practice if not cost-effective. OR INTRODUCE New Practices identified by Internal and Competitive Benchmarking Projects and/or other initiatives

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

A major reason cited in this doctoral research study for difficulties in successfully implementing TQM and TQM-driven Excellence Models in a higher education environment, relates to the fact that TQM is a strategic quality management concept which requires 'top-level management and leadership' to be success; as such it is bias towards what managers at the top or strategic level ought to do to ensure success. TQM and TQM-driven Excellence Models are therefore 'weak' in explaining the 'operational issues', which have the potential for making such models easier to understand and to implement. This section explains the linkage between the strategic implication of the Best Practice Gaps (BPGs) being 'positive', 'negative', or 'zero', and operational issues which relate to specific tasks and activities. Figure 5.4 below, shows the link between 'primary' and 'secondary' critical success factors representing strategic issues; and also the between secondary critical success factors and teaching and research tasks or activities at the operating level. The linkages are explained by the assumptions derived from the concepts and principles emanating from the responses to the Questionnaire and Semi-structured Interviews. At the strategic quality management level, managers and leaders at the chancellery, deanery and heads of department have to decide on which strategic direction to take, following an evaluation exercise, which may reveal that, a particular quality management practice has:

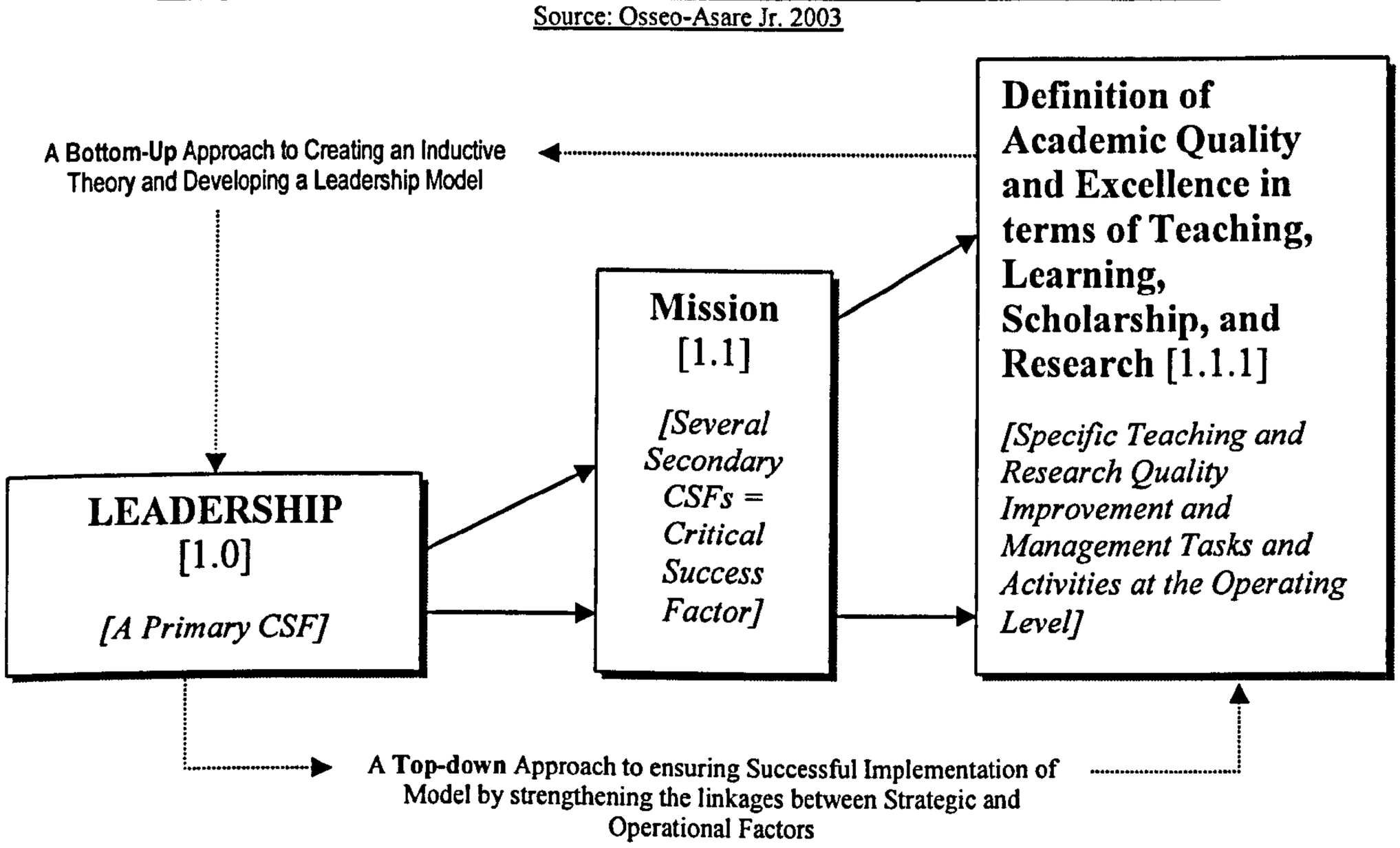
A BPG Value is POSITIVE, which suggests that, the quality management practice in question has to be SUSTAINED and/or IMPROVED upon, in order to maintain its strategic position above the zero-line on the Standard BPG Curve;

A BPG Value is NEGATIVE, which suggests that, the quality management practice in question has to be IMPROVED upon in order to raise its BPG Value upwards into the 'positive zone' above the zero-line on the Standard BPG Curve; ABANDONED and/or INTRODUCE a new practice known to have a 'positive' BPG Value,

A BPG Value is ZERO, which suggests that, the quality management practice in question has to be IMPROVED upon, in order to raise its BPG Value upwards into the 'positive zone' above the zero-line on the Standard BPG Curve.

After the strategic decision is make on what to do in terms of whether or not to 'sustain', 'improve', 'abandon', or 'introduce' a practice, the next logical step is to investigate the root causes of the BPG Results. This according to this researcher means returning to the empirical basis of the data collected by way of feedback; that linkage is provided via the secondary CSFs and the tasks and activities at the operating level. In this way 'strategic issues' and 'operational issues' are linked cyclically, through a *top-down* and *bottom-up* approach to quality management, in an ever-changing higher education environment (see Figure 5.4 below).

Figure 5.4
Linkage Between Primary and Secondary Critical Success Factors and Operating Tasks and Activities
Source: Osseo-Asare Jr. 2003



This interpretation places emphasis on the need to regularly monitor changes in primary and secondary critical success factors to determine their relative 'importance' and relative 'effectiveness' in delivering expected improvement results through

successful implementation of the right mix of specific teaching and research tasks at the operating level. Table 5.7 below, further extends the interpretation offered in Figure 5.4 above by providing a framework for evaluating the strength of the association between strategic and operational factors, to encourage successful implementation of quality improvement models in a higher education environment. Each specific operational task making up a 'process' needs to be evaluated independently to inform decision on 'process redesign'. As will be expected the evaluation criteria will be in terms of relative 'importance' and 'effectiveness' to ensure constancy of purpose.

Table 5.7
Operational Significance of Best Practice Gaps: - Linking Strategic Leadership Factors with Operational Practices
Source: Osseo-Asare Jr., 2003

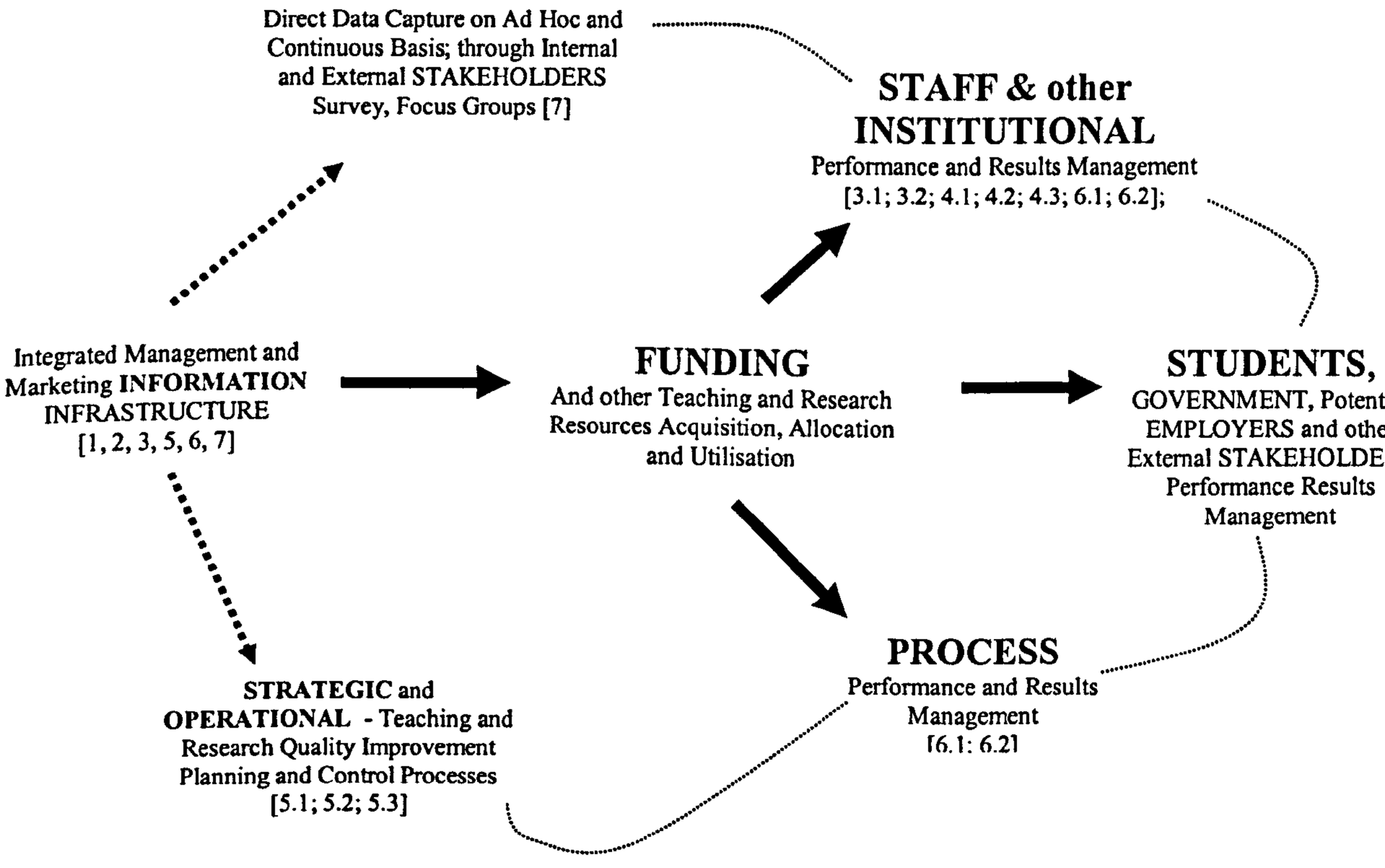
	Secondary CSFs Related Leadership Practices	Specific Operational Practices Which Need to be Evaluated
1	Mission [1.1]	Definition of Academic Quality and Excellence in terms of Teaching and Research
2	Vision [1.2]	Explicit Statement of Vision underpinned by Explicit Mission Statements
3	Values [1.3]	Integration of Personal and Institutional Values
4	Principles [1.4]	Principles underpinned by Values and Beliefs
5	Internal Communication Infrastructure [2.1]	Integration of Formal and Informal Structures
6	External Communication Infrastructure [2.2]	Integration of Internal and External Reporting Structures to ensure Consistency
7	Staff Empowerment [3.1]	Frequency of Delegation of Authority and Leadership Training
8	Staff Motivation [3.2]	Recognition and Reward for Staff and Team Contribution to Quality Improvement
9	Staff Support [4.1]	Clarification of Objectives and Targets and Continuous Flow of Input Resources
10	Staff Encouragement [4.2]	Resolving Staff-Staff and Staff-Students Complaints
11	Staff Rewards [4.3]	Operating a Fair Performance-related Reward Systems
12	Policy [5.1],	Regulations underpinned by Values and Principles
13	Strategy [5.2],	Strategic Choices underpinned by Values and Principles
14	Objectives and Targets [5.3]	Based on reliable Data, relevant Information, Intelligence and Knowledge
15	Ownership of Processes [6.1]	Matching Job Description with Job Specifications
16	Improvement of Processes [6.2]	Reliability of Tangible and Intangible Measures of Process Improvement
17	Data [7.1]	Accuracy, Reliability and Timeliness of Data from Multiple Sources
18	Information [7.2]	Relevance to Teaching and Research Quality Improvement Decisions
19	Intelligence [7.3]	As a Means for Sustaining Competitive Advantage
20	Knowledge [7.4]	As a Means for Sustaining Competitive Advantage

The 'bottom-up' consideration is based on the need for performance results on a particular teaching and research quality improvement task to feedback into the processes for monitoring both primary and secondary CSFs. We can infer from Figure 5.4 and Table 5.7 above, that, defining academic quality and excellence narrowly in terms of 'Teaching' and excluding 'learning', 'scholarship' and 'research' has the tendency of making the 'mission' objective of achieving academic excellence by sustaining continuous improvement in academic quality simply 'rhetorical'. A narrow definition does not represent a holistic and integrated attempt by the chancellery, deanery and heads of department to achieve 'real' or 'sustainable' quality improvement in Teaching, Learning, Scholarship and Research.

Data, Information, Intelligence, Knowledge Management for Quality

The philosophical and empirical assumptions outlined earlier, suggest that, accurate, reliable raw data needs to be collected on both ad hoc and continuous basis, and processed into relevant and timely information for decision-making, which will form the basis for obtaining intelligence for gaining and sustaining competitive advantage. The knowledge gained from several years of gathering and using intelligence needs to be effectively management, as a strategic resource for achieving excellent individual and institutional performance results. There is therefore an urgent need to develop a holistic and integrated approach to knowledge management for effective management of teaching and research quality improvement, in order to sustain academic excellence. Figure 5.5 below, shows 'seven' secondary critical success factors (CSFs) linked to 'INFORMATION' as the primary critical success factor. These factors are: (1) *Information Infrastructure, (2) Stakeholder Feedback, (3) Funding and other Teaching and Research Resources, (4) Strategic and Operational Quality Planning and Control, (5) Process Performance Management, (6) Staff and other Institutional Performance Management, (7) Students and other External Stakeholders Performance Management.*

Figure 5.5
Seven Secondary Critical Success Factors Linked to Information as the Primary Critical Success Factor
Source: Osseo-Asare Jr. 2003



The source of the 'seven' secondary CSFs can be traced by the 'codes' under each CSF in Figure 5.5 above, which are linked to Leadership Practice #2 and Policy and Strategy Practice #3 (see Table 5.8 below).

Table 5.8
Source of Secondary Critical Success Factors linked Information

	Critical Success Factor	Source - see codes under Appendix C3a, C3b, C5
1	Information Infrastructure	1, 2, 3, 5, 6, 7
2	Internal and External Stakeholders	7.1; 7.2; 7.3; 7.4
3	Strategic and Operational	5.1; 5.2; 5.3
4	Funding and other Resources	12.1; 12.2; 13.1; 13.2; 13.3
5	Staff and other Institutional	3.1; 3.2; 4.1; 4.2; 4.3; 6.1; 6.2
6	Students, Government,	17.1; 17.2; 18.1; 18.2
7	Process Performance & Results	6.1; 6.2

It is perhaps worth noting here that, the EFQM Excellence Model - unlike the MBNQA Model - does not directly categorise 'Information' as an enabler criteria even though it recognises its strategic importance for planning, control and decision-making.

Generating and Evaluating Alternative Strategies for Closing the Best Practice Gaps (BPGs) for Efficiency and Effectiveness

Figure 5.5 above, provides a multi-dimensional framework for effective management of data, information, intelligence and knowledge relating to teaching and research quality improvement. The 'arrows' represent 'probabilistic causal relationships between dimensions, and the 'dotted lines' represent probabilistic associations, which may be moving in one direction or in both directions. The framework suggests that:

- *Formal and Informal Structures at Strategic and Operational levels of management and leadership, need to be integrated, for efficient and effective management of reliable data on Teaching and Research Quality Improvement,*
- *Data should come from both internal and external sources;*
- *Data should be collected on 'ad hoc' and 'continuous' basis;*
- *Data collected should inform decisions on: diversification of sources of Teaching and Research Funding; and efficient allocation of funding to dedicated staff, who can effect improvements in core processes, which are known to deliver real improvements in students, government, staff, and institutional performance results.*

Table 5.9 below, shows that:

- *The BPG (importance) for Leadership Practice #2 is 'positive' and the corresponding BPG (effectiveness) is 'negative'.*

- *For Policy and Strategy Practice #3, the BPG (importance) and BPG (effectiveness) are both 'negative'.*

Table 5.9
Generating Alternative Strategies for Closing Best Practice Gaps for Leadership Practices #2, and Policy and Strategy Practice #3 Linked to Data, Information, Intelligence, and Knowledge on Quality Improvement
Source: Osseo-Asare Jr., 2003

Table 5.9A – LEADERSHIP PRACTICE #2

	Practice	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Leadership Practice #2 INTERNAL AND EXTERNAL ANAGEMENT AND MARKETING INFORMATION INFRASTRUCTURE **A WEAK PRACTICE**	BPG Value is Positive i.e.+20%, and lies in the Excellent Practice Zone. Resource Efficiency is at an 'Excellent Practice' Level – which may not represent an optimal result, and therefore cannot be sustained.	REDUCE Efficiency Level to OPTIMAL Level, by identifying synergies in the use of Resources linked to Data, Information, Intelligence, and Knowledge Management	BPG Value is Negative i.e. –44%, which lies below the Zero-line in the Weak Practice Zone.	IMPROVE level of Effectiveness, as a matter of urgency; by personal and active involvement in discouraging Management By Misinformation; and promoting Management By Fact.

Table 5.9B – POLICY AND STRATEGY #3

	Practice	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Policy and Strategy Practice #3 DATA, INFORMATION, INTELLIGENCE, KNOWLEDGE. **A WEAK PRACTICE**	BPG Value is Negative i.e. –8%, which lies in the Good Practice Zone.	IMPROVE level of Efficiency, by improving the accuracy, reliability and timeliness of Data and relevancy of Information for Quality Improvement Decision-making, at both strategic and operational levels.	BPG Value is Negative i.e. –25%, which lies in the Weak Practice Zone.	IMPROVE level of Effectiveness, as a matter of urgency because of the large 'negative' BPG value OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices known to deliver superior Teaching and Research Quality Improvement Results – Teaching Quality Assessment (TQA) Results, and Research Assessment Exercise (RAE) Results.

The strategic implication of these results is that, Leadership Practice #2 and Policy and Strategy Practice #3 are both 'Weak Practices', which need to be 'improved' upon or 'abandoned'.

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

The fact that these results have been derived from quality management practices relating to 'leadership' and 'policy and strategy', confirms the link between these two factors, and suggests that, data, information, intelligence and knowledge, play a central role managerial 'efficiency' and leadership 'effectiveness'.

In order to close the gaps in both managerial 'efficiency' and leadership 'effectiveness', Table 5.10 below provides a link between the strategic options emanating from the Best Practice Gaps (BPGs) and the specific tasks and activities at the operating level. Table 5.10 also provides a framework for assessing the strength of the association between strategic and operational factors, to ensure successful implementation of any selected teaching and research quality improvement strategies.

Table 5.10
Linking Strategic with Operational Factors Relating to Data, Information, Intelligence, and Knowledge Management
Source: Osseo-Asare Jr., 2003

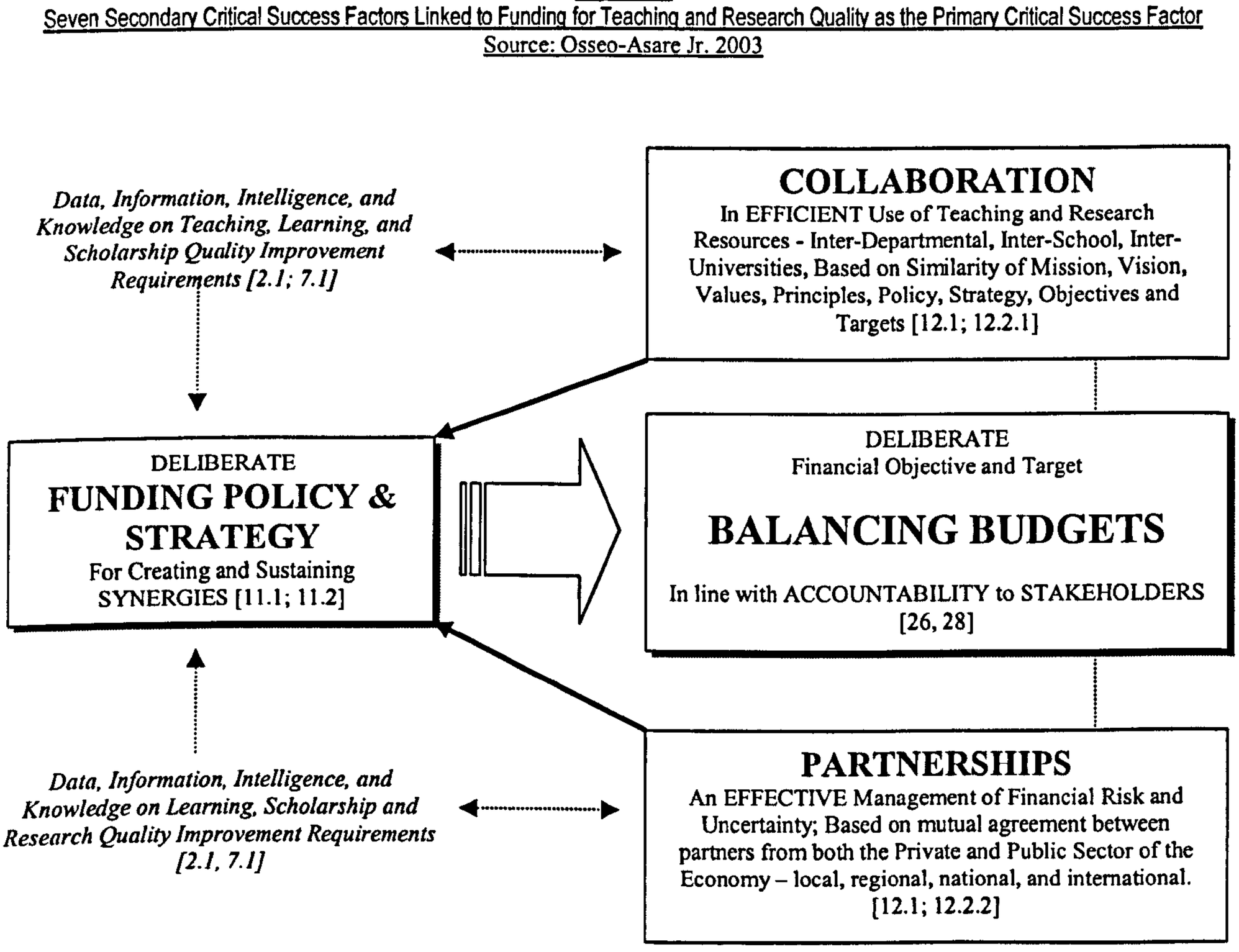
MIS = Management Information Systems; CSFs = Critical Success Factors

	Secondary CSFs	Specific Operational Practices Which Need to be Examined
1	Information Infrastructure	Effectiveness of Marketing Information and Intelligence Systems as integral parts of MIS
2	Stakeholder Feedback	Effectiveness of Questionnaire and Interview Plans
3	Funding and other Resources	Efficiency of Funding Allocation for Teaching and Research
4	Operational Quality Planning and Control	Extent of Deviation from Improvement Objectives and Targets
5	Process Performance Management	Gap between Process Improvement and Students' Satisfaction
6	Staff and other Institutional Performance	Research Assessment Exercise (RAE) Results
7	Students and other External Stakeholders	Teaching Quality Assessment (TQA) Results

Funding and other Resources for Teaching and Research Quality

The need to address the issue of funding and other resources for teaching and research quality improvement activities underpins the philosophical and empirical assumptions outlined in this thesis. This research study identified 'seven' secondary critical success factors associated with funding for teaching and research quality improvement. Appendix C3b Numbers (28 - 34) identifies these factors as follows: (1) *Creating Synergies, (2) Sustaining Synergies, (3) Identifying Areas of Weaknesses Needing Funding, (4) Diversification of Sources of Funding, (5) Acquisition of Funds, (6) Allocation of Funds, (7) Utilisation of Funds.* Figure 5.6 below, shows the link between these factors; the 'arrows' depict probabilistic causality, and the 'dotted' lines probable associations which may be moving in 'one' or 'both' directions. The 'codes' under each secondary CSFs helped to trace the origin of the factor, and how it is linked to Resources and Partnership Practices #1, #2, and #3; and other primary critical success factors, such as 'LEADERSHIP' and 'INFORMATION' (see Figure 5.6).

Figure 5.6
Seven Secondary Critical Success Factors Linked to Funding for Teaching and Research Quality as the Primary Critical Success Factor
Source: Osseo-Asare Jr. 2003



Generating and Evaluating Alternative Strategies for Closing the Best Practice Gaps (BPGs) for Efficiency and Effectiveness

Figure 5.7 above is a further development of Figure 4.7. It provides a multi-dimensional framework for efficient management of funding and other resources for effective teaching and research quality management. It suggests that:

Chancellery, Deanery, and Heads of Department, need to agree on the Funding Requirements for sustaining Teaching and Research Quality Improvement over 3-5 year period, using reliable Data, relevant Information, Intelligence and Knowledge on Best Practices. Reaching an agreement should be seen as an integral part of the Strategic Quality Planning Process, leading to formulation of deliberate Policy and Strategy for acquiring the desired level of funding from diverse sources - including mutually beneficial Collaboration and Partnership relationships. Value for Money and Cost Effectiveness should be the foundation for 'Accountability' to Stakeholders, and require financially prudence through effective management of Cash Balances and Budgetary Deficits.

Table 4.5 presented in Chapter Four shows a 'negative' BPG (importance) for Resources and Partnership Practice #1, and 'positive' values for Practices #2 and #3 are 'positive'. The corresponding BPG (effectiveness) values for all three practices are 'negative'. The strategic implication of the BPG Values is that Resources and Partnership Practices #1 and #2 are both 'Weak Practices', whereas practice #3 is a 'Good Practice'; which suggest that, alternative strategies for closing the perception gaps should be generated and evaluated for implementation. These alternative courses of action are outlined in below in Table 5.11, for three all Resources and Partnership Practices. For example, although the overall results for Practice #1 indicates that it is a 'weak' practice, the individual BPG values indicate that, some specific tasks, activities or processes within Practice #1 are 'good' and can be improved in order to transform the overall results into a 'best' or 'excellent' practice. This is the philosophy for improvement being put forward by the 'notion' of Best Practice Gaps.

Table 5.11
Generating Alternative Strategies for Closing Best Practice Gaps for Resources and Partnership Practices #1, #2, #3
Source: Based on Table 4.5

Table 5.11A – RESOURCES AND PARTNERSHIP PRACTICE #1

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Resources and Partnership Practice #1 CREATING AND SUSTAINING SYNERGIES **A WEAK PRACTICE**	BPG Value is Negative i.e.-15%, which lies in the GOOD Practice Zone. It means Funding and other Resources for Teaching and Research Efficiency are at the 'Good Practice' Level.	IMPROVE Efficiency Level, by identifying Synergies in Budgetary Allocations for Teaching, Learning, Scholarship, and Research Activities.	BPG Value is Negative i.e. – 63%, which lies in the WEAK Practice Zone. It indicates Misappropriation of Budgetary Allocations, and therefore lack of Accountability	IMPROVE level of Effectiveness, as a matter of urgency; through tighter Budgetary Controls. OR ABANDON Practice if not Cost-effective; and/or INTRODUCE new Practices

Table 5.11B – RESOURCES AND PARTNERSHIP PRACTICE #2

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Resources and Partnership Practice #2 DIVERSIFICATION OF SOURCES OF FUNDING **A WEAK PRACTICE**	BPG Value is Positive i.e. +4%, which lies in the BEST Practice Zone.	IMPROVE level of Efficiency, by ensuring that Collaboration and Partnership Relationships are: mutually beneficial, legally binding, direct and active involvement of leadership at the Chancellery, Deanery and Heads of Departments.	BPG Value is Negative i.e. –56%, which lies in the WEAK Practice Zone. The large negative BPG (effectiveness) value is an indication that the Practice is not 'Cost-Effective' and therefore a drain on the Budget	IMPROVE level of Effectiveness, as a matter of urgency because of the large 'negative' BPG value OR ABANDON Practice if Practice has no potential; and/or OR INTRODUCE new Practices known to be cost-effective, and leads to increased levels of Funding for Teaching and Research Quality Improvement.

Table 5.11B – RESOURCES AND PARTNERSHIP PRACTICE #2

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
3	Resources and Partnership Practice #3 ACQUISITION, ALLOCATION, UTILISATION OF FUNDS **A GOOD PRACTICE**	BPG Value is Positive i.e. +6%, which lies in the BEST Practice Zone.	IMPROVE level of Efficiency, by improving the Quality of Collaborators and Partners.	BPG Value is Negative i.e. –20%, which lies in the GOOD Practice Zone.	IMPROVE level of Cost- Effectiveness OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices known to deliver superior Teaching and Research Quality Improvement Results.

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

Table 5.12 below, provides typical examples of specific tasks and activities at the operational levels, linked to the 'seven' secondary critical success factors (CSFs). These are examples of 'weak' areas of practice, which need serious consideration by managers and leaders at the chancellery, deanery and heads of department. They reinforce the belief fact that, funding underpins other resources for teaching and research quality improvement. Table 5.13 below, links the secondary CSFs) to the

specific tasks and activities at the operating level; and also provides a framework for evaluating the strength of the association between strategic and operational factors.

Table 5.12
Operational Areas of Serious Concern to Strategic and Operational Decision-Makers in Higher Education
Source: Based on Resources and Partnership Practices #1, #2, #3

1. Increased funding is needed to improve Teaching Methods to help less motivated Students with low Entry Standards and those with Disabilities move from surface-learning to deep-learning - in line with the Government's Agenda for Widening Participation [12.1.2]

2. The need for increased funding to support Scholarly Activities of Teachers who are not research-active, but have the potential to improve the research ranking of their department [12.1.3]

3. Increased funding for regular maintenance and continuous investment in Teaching and Research infrastructure in order to sustain teaching and research quality improvement [12.1.4]

4. Increased funding in support of efforts to identify and effectively integrate Academic, Administration, and Support-service areas to ensure cost-effectiveness and value for many operations [12.1.5]

5. Collaboration with Further and other Higher Educational Institutions with shared Mission; Government Departments – including the QAA and HEFCE; and other local, regional, national and international Public Sector organisations [12.2.1]

6. Partnerships with local, regional, national, and international Private Sector Organisations in support of Masters, Doctoral and Post-doctoral Programmes and Professorships in applied research [12.2.2]

7. Justification of Strategic Quality Improvement Plans based on Institutional and Departmental Funding priorities, and realistic achievable Teaching and Research Quality Improvement Objectives and Targets linked to Funding priorities [13.1.2]

8. Robust Defence of Long and Short-term Spending Plans relating to Teaching and Research; backed by realistic 3 – 5 year Cash Flow Forecasts [13.1.3]

9. Implementation of an Open Bidding Process for Funds under explicit conditions [13.2.2]

10. Implementing less bureaucratic Teaching and Research Budget Centres comprising of Cost Units, Revenue Units, Profit Units working as a Team, for efficient funding allocation and utilisation to enhance accountability [13.3.1]

11. Activity-based Costing is most appropriate for costing Teaching and Research Quality Improvement Activities for effective management of Teaching and Research Overheads [13.3.2]

12. Correct timing of decisions to discontinue a Programme or an improvement initiative because of continuous lose of teaching and research revenue [16.1.2]

13. Effective management of Budgetary Deficits by ensuring budgetary allocations are linked to viable projects [16.2.2]

14. Effective integration of Short-term and Long-term Teaching and Research Quality Improvement Plans, to prevent misappropriation of resources and missed opportunities [28.1.2]

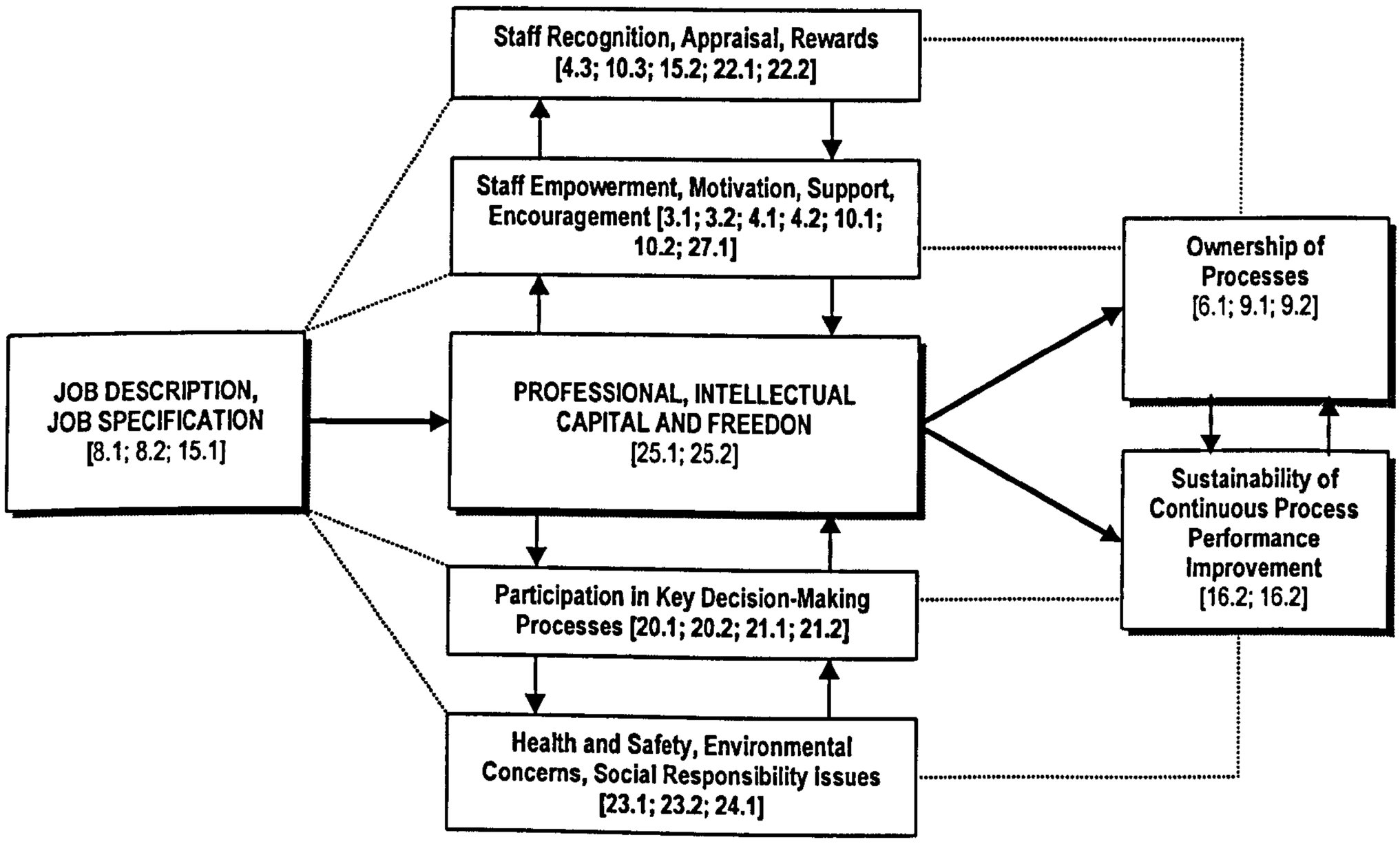
Table 5.13
Linking Strategic with Operational Factors Relating to Data, Information, Intelligence, and Knowledge Management
Source: Osseo-Asare Jr., 2003

	Secondary CSFs Related Leadership Practices	Specific Operational Practices Which Need to be Examined
1	Creating Synergies	Deliberate Policies and Strategies for improving Efficiency in Funding Allocation
2	Sustaining Synergies	Effective Interface Management to ensure Cost-Effectiveness of Provisions
3	Identifying Areas of Weaknesses Needing Funding	Effective Management of Overheads Using ABC Systems
4	Diversification of Sources of Funding	Management of Collaboration and Partnership Relationships
5	Acquisition of Funds	Teaching and Research Infrastructure for Staff and Students with Disability
6	Allocation of Funds	Effective Management of Teaching and Research Budget Centres
7	Utilisation of Funds	Effective Management of Cash Balances

Academic, Administrative, and Support-service Staff Performance, Results and Rewards Management for Academic Quality

This sub-section brings together quality management practices associated with 'four' primary critical success factors (CSFs): (1) *Staff Management*, (2) *Staff Results*, (3) *Policy and Strategy,* and *(4) Leadership Practices,* under one 'enabler' criterion for preserving institutional autonomy: *Staff Performance, Results and Rewards Management.* This is based on the empirical evidence from in this research study, which suggest that, a probabilistic causal relationship exist between these *primary* CSFs, by way of similarity in specific tasks and activities performed under each of the *secondary* CSFs at the operational level of management. Appendix C3b identified 31 secondary CSFs associated with the 4 *primary* CSFs: staff management, staff results, policy and strategy, and leadership. The 31 *secondary* CSFs are presented as an aggregate of 'nine' areas of concern, in Figure 5.7 below.

Figure 5.7
Seven Secondary Critical Success Factors Linked to Staff Performance Management as the Primary Critical Success Factor
Source: Osseo-Asare Jr. 2003



The origins of the 31 'secondary' critical success factors (CSFs) can be traced using the 'codes' under each CSF in Figure 5.7 above, which are linked to the 4 'primary' critical success factors. The 'arrows' represent 'probabilistic causal relationships

between dimensions, and the 'dotted lines' represent probabilistic associations, which may be moving in one direction or in both directions.

Generating and Evaluating Alternative Strategies for Closing the Best Practice Gaps for Efficiency and Effectiveness

Figure 5.7 above, provides a multi-factor framework for efficient management of staff performance, results and reward systems. The framework suggests that:

Job Descriptions should explicitly describe the actual tasks and activities to be performed by Staff as individuals and as members of the Teaching and Research Quality Improvement Team. It is in the long-term interest of Staff and the Institution to ensure that the requirements or specifications for completing a task or activity efficiently and effectively are accurately matched with individual skills, knowledge, and experience. Staff with the right skills, knowledge and experience, should not be seen as a 'cost' but valued as 'intellectual capital' to be empowered through ownership of processes for sustaining delivery of world-class performance results; active participation in process improvement decisions; and recognized and rewarded for achieving agreed departmental and institutional performance results.

Table 5.14 below, suggests alternative strategies for closing the Best Practice Gaps (BPG) linked to the enabler criterion: 'Staff Performance, Results and Rewards Management'. As expected it combines the relevant BPGs for *staff management, staff results, policy and strategy, and leadership*.

Table 5.14
Generating Alternative Strategies for Closing Best Practice Gaps for Staff Performance and Results Management Practices
Source: Osseo-Asare Jr., 2003

Table 5.14A – STAFF MANAGEMENT PRACTICE #1

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Staff Results Practice #1 STAFF PERFORMANCE, POLICY AND STRATEGY **A WEAK PRACTICE**	BPG Value is Negative i.e.-8%, and lies in the GOOD Practice Zone. Managerial Efficiency is at the 'Good Practice' Level.	IMPROVE Efficiency Level, by ensuring that Job Descriptions Match Person Specifications for a particular Teaching and Research Task or Activity	BPG Value is Negative i.e. – 65%, which lies in the WEAK Practice Zone.	IMPROVE Effectiveness, as a matter of urgency, through Process Ownership. OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE New Practices

Table 5.14B – STAFF MANAGEMENT PRACTICE #2

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Staff Results Practice #2 STAFF EMPOWERMENT **A WEAK PRACTICE**	BPG Value is Negative i.e.-6%, and lies in the GOOD Practice Zone. Managerial Efficiency is at the 'Good Practice' Level.	IMPROVE Efficiency, by using Staff ideas and suggestions to improve Processes.	BPG Value is Negative i.e. – 63%, which lies in the WEAK Practice Zone. IMPROVE Effectiveness Level as a matter of urgency	IMPROVE Effectiveness, by addressing Staff Welfare Issues. OR ABANDON Practice if not Cost-effective; and/or INTRODUCE New Practices

Table 5.14C – STAFF MANAGEMENT PRACTICE #3

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
3	Staff Results Practice #3 STAFF SUPPORT, MOTIVATION, REWARDS **A WEAK PRACTICE**	BPG Value is Positive i.e.+16%, and lies in the EXCELLENT Practice Zone. Managerial Efficiency is at the 'Excellent Practice' Level, which may not be sustainable.	REDUCE Efficiency Level to OPTIMAL, by Review of Teaching and Research Funding Allocations for Quality Improvement.	BPG Value is Negative i.e. – 68%, which lies in the WEAK Practice Zone. IMPROVE Level of Effectiveness as a matter of urgency	IMPROVE level of Effectiveness, by Reducing the Cost of Bureaucracy through PROCESS REDESIGN. OR ABANDON Practice if not Cost-effective; and/or INTRODUCE New Practices

Table 5.14D – STAFF RESLTS PRACTICE #1

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
4	Staff Results Practice #1 IMPLEMENTING EQUAL OPPORTUNITY **A WEAK PRACTICE**	BPG Value is Negative i.e.-58%, and lies in the WEAK Practice Zone. Managerial Efficiency needs to be IMPROVED as a matter of urgency.	IMPROVE Efficiency Level, by formal Review of Staff Recruitment Policy and Strategy relating to issues of Discrimination.	BPG Value is Negative i.e. – 65%, which lies in the WEAK Practice Zone. IMPROVE Level of Effectiveness as a matter of urgency	IMPROVE Effectiveness by ensuring that existing policy and strategy are successfully implemented. OR ABANDON Practice if not Cost-effective; and/or INTRODUCE New Practices

Table 5.14E – STAFF RESULTS PRACTICE #2

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
5	Staff Results Practice #2 STAFF INVOLVEMENT **A WEAK PRACTICE**	BPG Value is Negative i.e.-15%, and lies in the GOOD Practice Zone. Managerial Efficiency is at the 'Good Practice' Level.	IMPROVE Efficiency Level, by Brainstorming Ideas with Staff before final decisions are made.	BPG Value is Negative i.e. – 60%, which lies in the WEAK Practice Zone. IMPROVE Level of Effectiveness as a matter of urgency	IMPROVE level of Effectiveness, by incorporating Staff Ideas into Improvement Decisions. OR ABANDON Practice if not Cost-effective; and/or INTRODUCE New Practices

Table 5.14A – STAFF RESULTS PRACTICE #3

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
6	Staff Results Practice #3 STAFF PERFORMANCE AND REWARD SYSTEMS **A WEAK PRACTICE**	BPG Value is Negative i.e.-53%, and lies in the WEAK Practice Zone. Managerial Efficiency needs to be IMPROVED or ABANDONED as a matter of urgency	IMPROVE Efficiency Level, by Reviewing the link between Staff Performance and Rewards OR ABANDON Practice	BPG Value is Negative i.e. – 54%, which lies in the WEAK Practice Zone. IMPROVE Level of Effectiveness or ABANDON Practice as a matter of urgency.	IMPROVE level of Effectiveness, by strengthening the link between Process Redesign, Process Performance, Staff Performance, and Staff Rewards. OR ABANDON or INTRODUCE New Practice s

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

Table 5.15 below outlines some of the key tasks and activities at the operating level that, should be reflected upon by managers and leadership at the strategic level, when brainstorming ideas and evaluating alternative courses of action for closing the Best Practice Gaps. Table 5.16 shows a framework for evaluating the strength of the association between strategic and operational factors in terms of their relative 'importance' and relative 'effectiveness'.

Table 5.15
Examples of Operational Tasks and Activities Linked to Primary and Secondary Critical Success Factors at the Strategic Level
Source: Based on Appendix A2 – Staff Management, Staff Results, Policy and Strategy, and Leadership Practices

1. Effective Deployment of Quality Improvement Policy and Strategy [2.1.2]
2. De-centralised Staff Development Budgetary Systems [3.1.3]
3. Systems for addressing Staff Welfare issues [3.2.4]
4. ICT Support for Teaching and Research Staff [4.1.2]
5. Annual Staff Appraisals effectively linked to Promotions and Improvement in Staff Finances [4.3.2]
6. Staff Retention strategy resulting in reductions in Staff Turnover and Staff-student ratios.[5.2.3]
7. Job Specifications effectively matching individual ability with Task [6.1.2]
8. Feedback from Students and Staff Surveys are effectively incorporated into Teaching and Research Quality Improvement Policies and Strategies [8.1.1]
9. Incorporating staff experiences, ideas and suggestions in the process of improving Teaching Quality Assessment and Research Assessment Exercises Scores [9.1.1]
10. Effective management of increasing workloads resulting from rising student numbers [10.2.2]
11. Timely Promotion in line with career objectives of Teaching and Research Staff [10.3.2]
12. Job Descriptions specifically assign particular task or activity to one individual but to a team, making it easier to know who exactly is doing what in a group situation [15.1.1]
13. Staff involved in less important decisions, leaving them feeling isolated, frustrated, with little or no sense of achievement or value [21.2.2]
14. Procedure for Performance Appraisal Systems (PAS) varied sufficiently to take account of the needs of Staff with disabilities in a work environment [22.1.3]
15. Aggressive reporting of institutional activities to assist in the preservation and sustainability of natural resources – choice of transportation for staff and students, reduction of waste, economic usage of gas, water, electricity, recycling materials [23.1.2]
16. Aggressive in adopting preventive measures to promote Health and Safety at Work [23.2.1]

17. Effective in the management of stress at work. Number of Days off Sick are effectively monitored and followed up for appropriate action to be taken, in order to control the negative impact of Absenteeism on Staff and Student Morale [23.2.2]

18. Majority of Staff at all levels of management and leadership – with responsibility for Teaching and Research Quality Improvement – should belong to any reputable Professional Body promoting Teaching, Learning and Research Quality [25.1.1]

19. Promotion of intellectual capital through knowledge and experience in integrated management and interface management -which are based on multiple disciplines [25.2.1]

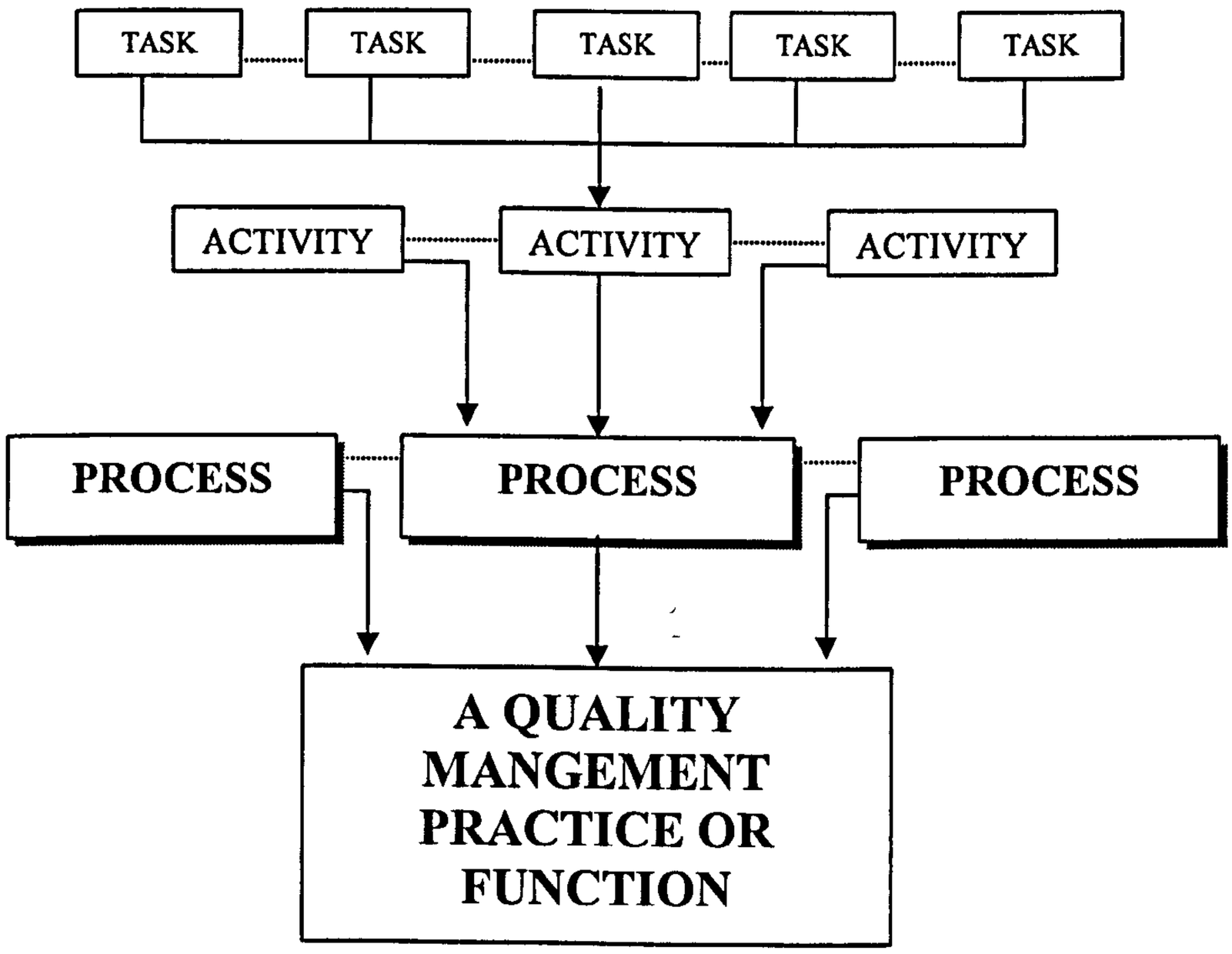
Table 5.16
Linking Strategic with Operational Factors Relating to Staff Performance and Results Management
Source: Osseo-Asare Jr., 2003

	Secondary CSFs Related Leadership Practices	Specific Operational Practices Which Need to be Examined
1	Job Descriptions	Regular Review to reflect changes in Tasks and Activities
2	Job Specifications	Effective matching of Task Requirements and Staff Skills and Knowledge
3	Professional Integrity	Dealing issues of Diversity and Equality
4	Intellectual Capital	Multiple Disciplines for Effective Integration and Interface Management
5	Intellectual Freedoms	Integration of Individual and Institutional Ethical Policy and Strategy
6	Ownership of Processes	Integration of Formal and Informal Structures of Ownership
7	Sustainability of Continuous Process Improvement	Effectiveness of Process Improvement Policy and Strategy Deployment
8	Participation in Key Improvement Decisions	Level of Staff Participation and Involvement In Improvement Processes
9	Staff Empowerment, Support, Encouragement	Impact of Leadership Training on Staff Performance Results
10	Health and Safety, Environmental Concerns	Effective Management of Stress at Work
11	Staff Performance Appraisal and Rewards	Effectiveness of Decentralised Staff Development Budgetary Systems
12	Staff Recognition and Rewards	Effectiveness of Performance Related Rewards Systems

A Framework of Core Academic, Administrative, and Support-service Processes for Academic Quality

This *primary* critical success factors represents an enabler-criterion, which integrates Process Management Practices #1, #2, and #3. The philosophical and empirical assumptions outlined earlier, suggest that process performance improvement and management are essential to the delivery of superior stakeholder results. The design of processes and the efficient and effective management of a framework of core processes are prerequisite to sustaining teaching and research quality improvement. Figure 5.8 below, identifies the building blocks of a 'process' as tasks and activities. It also shows that a 'collection of processes' makes up a 'practice' and a 'collection of practices' makes up a 'function'. The achievement of real or measurable improvements in teaching and research processes require a logical definition of the boundaries of a 'process' - this definition will also facilitate 'Process Redesign'. From Figure 5.8 we can also see that, if a 'task' is fundamentally not 'important' the chances are that, 'activities' and 'processes' emanating from it will be corrupted and rendered ineffective in delivering desired levels of quality improvement. This is consistent with the philosophical and empirical assumption underpinning process performance improvement and management, developed in this doctoral research thesis.

Figure 5.8
THE MAJOR COMPONENTS OF A PROCESS – Based on a Holistic and Integrated Conception of a Process
Source: Osseo-Asare Jr 2003



From Appendix C3b we have identified 38 'core processes' each comprising of specific 'tasks' and 'activities'. These are linked to the secondary critical success factors, which in turn are associated with seven primary critical success factor. These are (1) Leadership, (2) Policy and Strategy, (3) Staff Management, (4) Resources and Partnership, (5) Students' Results, (6) Staff Results, (7) Society Results, and (8) Institutional Results - see Table 5.17 below, for the list of core processes.

Table 5.17
A Comprehensive List of Core Processes Linked to Primary Critical Success Factors
Source: Based on Appendix C3a, C3b, C4, C5

1. Process of redefining Academic Quality, Academic Excellence in terms of Teaching, Learning, Scholarship and Research [1.1.1; 1.1.2]
2. Process of ensuring that Vision Statements are underpinned by Mission [1.2.1]
3. Process of addressing issues of Diversity and Equality [1.3.1]
4. Process of ensuring that Continuous Performance and Quality Improvement are achieved through Value for Money [1.4.1]
5. Process of ensuring that Institutional Autonomy enhances Intellectual Freedoms [1.4.2]
6. Process for effective deployment of Teaching and Research Quality Improvement Policy, Strategy, Objectives and Targets [2.1.2]
7. Processes for Internal and External Transfer of Best Practices [2.2.1]
8. Process for determining Leadership Training Gaps [3.1.4]
9. Processes for addressing Staff welfare issues [3.2.4]
10. Processes for Handling Staff-Student Complaints about Teaching and Learning Styles [4.2.1]
11. Processes for efficient allocation of funding and other resources for Teaching and Research [5.2.2]
12. Process for improving Teaching Quality Assessment (TQA) and Research Assessment Exercises (RAE) Scores [9.1.1]
13. Process for delegating Authority and Responsibility to subordinate staff [9.1.2]
14. Succession Planning Process [9.2.2]
15. Process for managing increasing workloads [10.2.2]
16. Process for formulating and implementing deliberate strategies for creating synergies [11.1.1]
17. Process for effective management of interfaces between academic and administrative activities; teaching and research; and scholarship and research. [11.2.2]
18. Process for helping students move from surface-learning to deep-learning [12.1.2]
19. Process for effective integration of Academic, Administration, and Support-service areas [12.1.5]
20. Process for effective management of Collaborative and Partnership arrangements [12.2.1]
21. Process for rationalizing Teaching and Research priorities [13.2.1]
22. Process for Open Bidding Process for Funds under explicit conditions [13.2.2]
23. Process for documenting Tasks and Activities to facilitate the use of Activity-based Costing Methods for effective management of Teaching and Research Overheads [13.3.2]
24. Process for regular monitoring of tasks and activities [14.2.1]
25. Process for managing frequent changes in management and leadership at all levels [16.1.1]

26. Process for effective management of serious academic offences and appeals relating to examinations and assignments results, and research supervision at undergraduate and post-graduate levels [17.2.3]

27. Process for prioritising the needs and expectations of students, in the event of budgetary constraints [18.1.2]

28. Process for designing Questionnaires to capture the real needs and expectations of Students and other external Stakeholders [19.1.1]

29. Process for defining Teaching and Research Problems and Opportunities, and generating and evaluating alternative ways of solving a problem or taking advantage of an opportunity [21.1.1]

30. Process for effective integration of Performance Appraisal System (PAS) and Performance Management System (PMS) [22.1.1]

31. Process for reporting institutional activities relating to the preservation and sustainability of natural resources – choice of transportation for staff and students, reduction of waste, economic usage of gas, water, electricity, recycling materials [23.1.2]

32. Process for effective management of stress at work. [23.2.2]

33. Process for effective management of State Relations and Relationship with other External Stakeholders [24.1.1]

34. Process for dealing with adverse impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduate; Staff Teaching Practices and Staff Morale [24.1.2]

35. Teaching and Research Quality Planning Processes [28.1.1]

Figure 5.10 below, shows that, the 'core processes' listed above under Table 5.17, relate to academic, administrative, and support-service functions in a higher education environment. It is based on the assumption that to be successful a model for sustaining academic quality must integrate quality improvement processes from all areas directly linked to academic activities. These 'processes' are underpinned by systems thinking – which means each 'process' transforms 'input-resources' into 'output-results'.

Figure 5.9
A Framework of Core Processes Derived from Pool of Tasks and Activities, and underpinned by Systems Thinking
Source: Osseo-Asare Jr. 2003

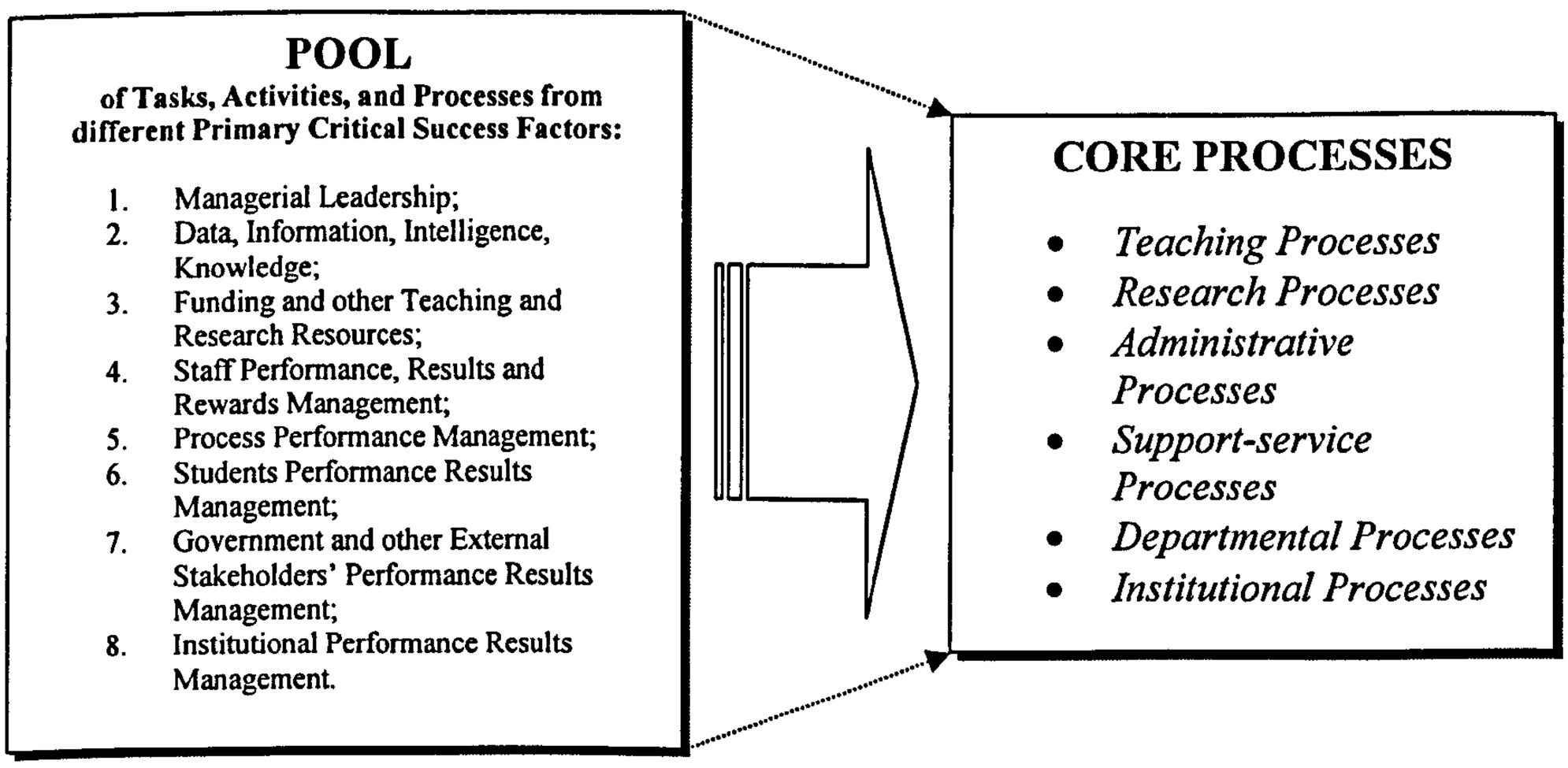


Figure 5.9 is a further development of the framework for effective process management presented in Figure 4.8; it suggests that:

The performance of Processes needs to be monitored regularly to ensure they are delivering superior results for students, government, potential employers, and for the institution itself. Effective monitoring of process performance requires that the design of new processes and/or resign of existing processes are carried out on the basis of reliable data, relevant information, and knowledge of the relative importance and relative effectiveness of the individual 'tasks' and 'activities' making up a 'process'. Documentation of these tasks and activities should be categorised under the various secondary critical success factors, to facilitate internal transfer of best practices for sustain process improvement. Processes in the 'pool' need to be evaluated using predetermined criteria, order to create a framework of integrated processes that are known to deliver significant improvement in teaching and research quality.

Generating and Evaluating Alternative Strategies for Closing the Best Practice Gaps for Efficiency and Effectiveness

Table 4.6 presented in Chapter Four shows that the BPG (importance) Values for Process Management Practice #1 and Practice #3 are 'positive', and the value for Practice #2 is 'negative'. The corresponding BPG (effectiveness) Values for all three practices are 'negative'. The strategic implication of these results is that Practices #1, Practice #2 and Practice #3 are all examples of 'Weak Practices'. Table 5.18 below identifies alternative strategies for closing the Best Practice Gaps for relative importance and relative effectiveness for Process Management Practices #1, Practice #2, and Practice #3.

Table 5.18
Generating Alternative Strategies for Closing Best Practice Gaps for Process Management Practices #1, #2, #3
Source: Osseo-Asare Jr., 2003

Table 5.18A – PROCESS MANAGEMENT PRACTICE #1

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Process Management Practice #1 MAINTAINING A FRAMEWORK OF CORE PROCESSES **A WEAK PRACTICE**	BPG Value is Negative i.e.+4%, and lies in the BEST Practice Zone. Managerial Efficiency in evaluating Alternative Processes is at the 'Good Practice' Level.	IMPROVE Efficiency Level, by identifying Synergies in between Core Processes	BPG Value is Negative i.e. –60%, which lies in the WEAK Practice Zone. IMPROVE level of Effectiveness, as a matter of urgency	IMPROVE Effectiveness, by Reducing the Cost of Bureaucracy through elimination of Tasks and Activities with the potential of weakening the framework.

Table 5.18B – PROCESS MANAGEMENT PRACTICE #2

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Process Management Practice #2 PROCESS OWNERSHIP FOR IMPROVEMENT **A WEAK PRACTICE**	BPG Value is Negative i.e. -3%, which lies in the GOOD Practice Zone.	IMPROVE level of Efficiency, by formal Delegation of Authority and Responsibility to Subordinate Staff.	BPG Value is Negative i.e. –60%, which lies in the WEAK Practice Zone. IMPROVE level of Leadership Effectiveness, as a matter of urgency because of the large 'negative' BPG value	IMPROVE Effectiveness by matching Job Description with Person Specification OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices

Table 5.18B – RESOURCES AND PARTNERSHIP PRACTICE #2

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
3	Process Management Practice #3 SUSTAINING CONTINUOUS PROCESS IMPROVEMENT **A WEAK PRACTICE**	BPG Value is Positive i.e. +16%, which lies in the EXCELLENT Practice Zone. This level of Managerial Efficiency may not be sustainable and needs to be reduced to an Optimal Level	REDUCE level of Efficiency to an Optimal Level to ensure Sustainable Performance Results.	BPG Value is Negative i.e. –59%, which lies in the WEAK Practice Zone. IMPROVE level of Leadership Effectiveness, as a matter of urgency because of the large 'negative' BPG value	IMPROVE Effectiveness by accuracy Measurement of Process Improvement OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices known to deliver superior Teaching and Research Quality Improvement Results.

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

Table 5.19 below, provides a link between the strategic implication of the Best Practice Gaps (BPGs) and specific tasks and activities at the operating level. It also provides a framework for evaluating the strength of the association between the secondary critical success factors and tasks and activities at the operating level. The results of the evaluation will be useful in the design of new processes and resign of existing processes.

Table 5.19
Linking Strategic with Operational Factors Relating to Process Management
Source: Osseo-Asare Jr., 2003

	Secondary CSFs Related Leadership Practices	Specific Operational Practices Which Need to be Examined
1	Identifying and Selecting Core Processes	Effective Documentation of Process Performance
2	Maintaining Framework of Core Processes	Regular Monitoring of Tasks and Activities under each Process
3	Process Ownership by Staff	Job Descriptions match Job Specification
4	Process Improvement by Staff	Linked to Successive improvement in TQA and RAE Results
5	Sustaining Continuous Process Improvement	Ensuring Cost-Effectiveness through Value for Money
6	Process Design and Redesign	Effectiveness in Reducing Workloads
7	Staff Reward for Process Improvement	Effective Management of Interfaces

B. Improving the Efficiency and Effectiveness of 'Accountability' Criteria

Empirical evidence provided by this doctoral research study suggest, that 'accountability' to internal and external stakeholder is the best possible means for sustaining intellectual freedoms and institutional autonomy. It represents the other end of a 'weighing scale' and helps achieve a strategic balance between competing means and conflicting stakeholder demand. This section will outline the alternative strategies for closing the Best Practice Gaps (BPGs) relating to the following three 'accountability criteria: (1) students' results; (2) government and other external stakeholders' results; and (3) institutional results. Before doing that, an argument in support of a model that satisfies the needs and expectations of both internal and external stakeholders is established. Analysis of the responses to Questionnaire Part Three on a Survey of Stakeholders in UK Higher Education suggests that, there are many internal and external stakeholder groups in UK higher education, and that these stakeholder groups have diverse needs and expectations. It demands that the critical success factors associated with stakeholder results are constantly monitored to determine changes in their long-term *interest* in the survival of the systems of higher education, *power* to influence the quality of teaching and research, and *benefits* derived from higher education provision by each stakeholder group. Figure 5.10 confirms there are four key stakeholder groups in UK higher education. These are:

- *Academic and non-academic STAFF in management and leadership positions,*
- *The GOVERNMENT acting through the Department of Education and Skills (DfES), and agencies such as the Quality Assurance Agency (QAA) and the Higher Education Funding Council for England (HEFCE);*
- *Potential Employers; and*
- *STUDENT of all categories.*

Figure 5.10
Key Stakeholder Groups in UK Higher Education
Source: Osseo-Asare 2003

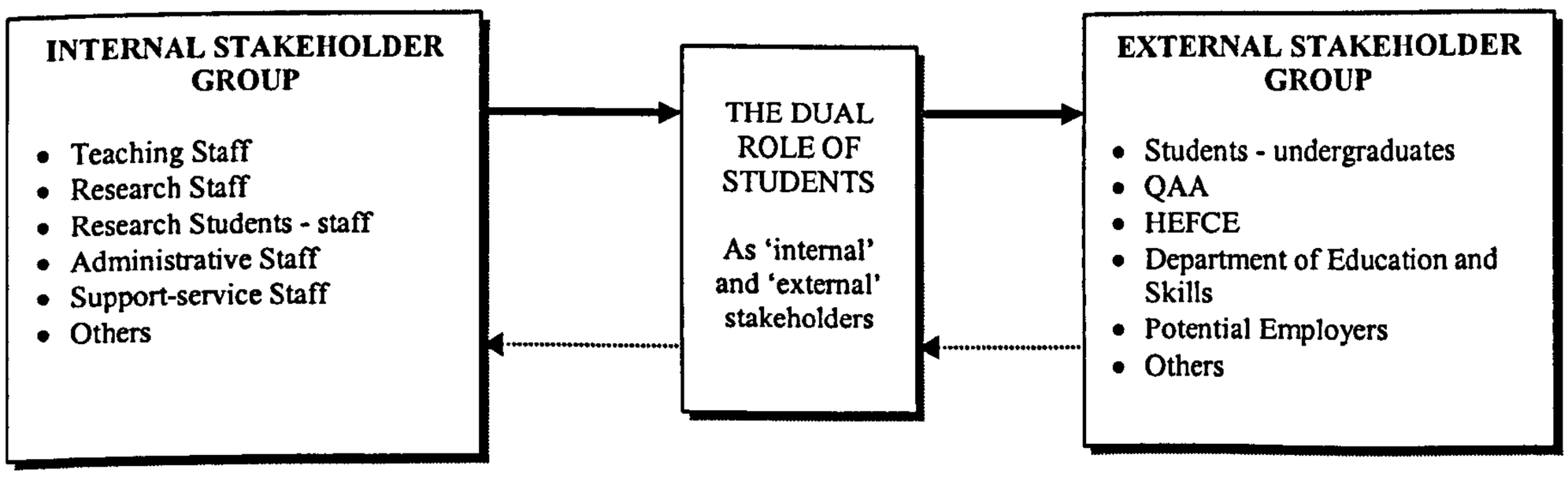
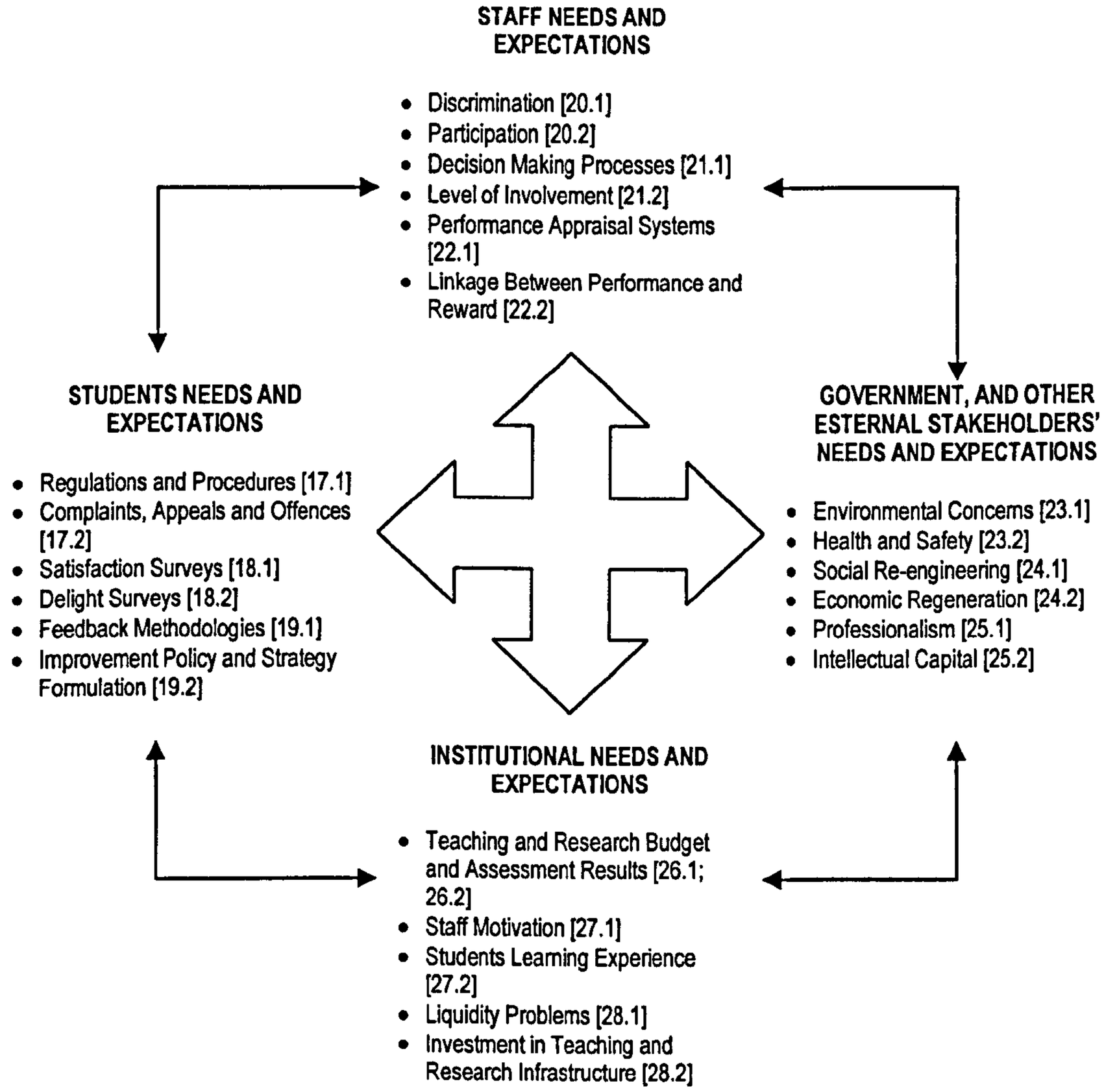


Figure 5.10 above suggest that 'students' play a dual role. First, as part of the general system of interest they may be seen as internal stakeholders whose contribution to identifying area of teaching and research activities needs to be valued. This is exemplified by the role played by doctoral research students. Second, as external stakeholders in the specific system of interest, they are customers who are paying for a service as such they are remotely attached to the operational activities of particular institutions, and therefore able to demand whatever they want – this is exemplified by the role played by undergraduate students.

Figure 5.11 below suggest that, there is an urgent need to balance the 'power', 'interests', 'contributions', and 'benefits' of key stakeholders through harmonization and effective integration of their needs and expectations.

Figure 5.11
Balancing the Needs and Expectations of Internal and External Stakeholders in UK Higher Education
Source: Osseo-Asare Jr. (2003)

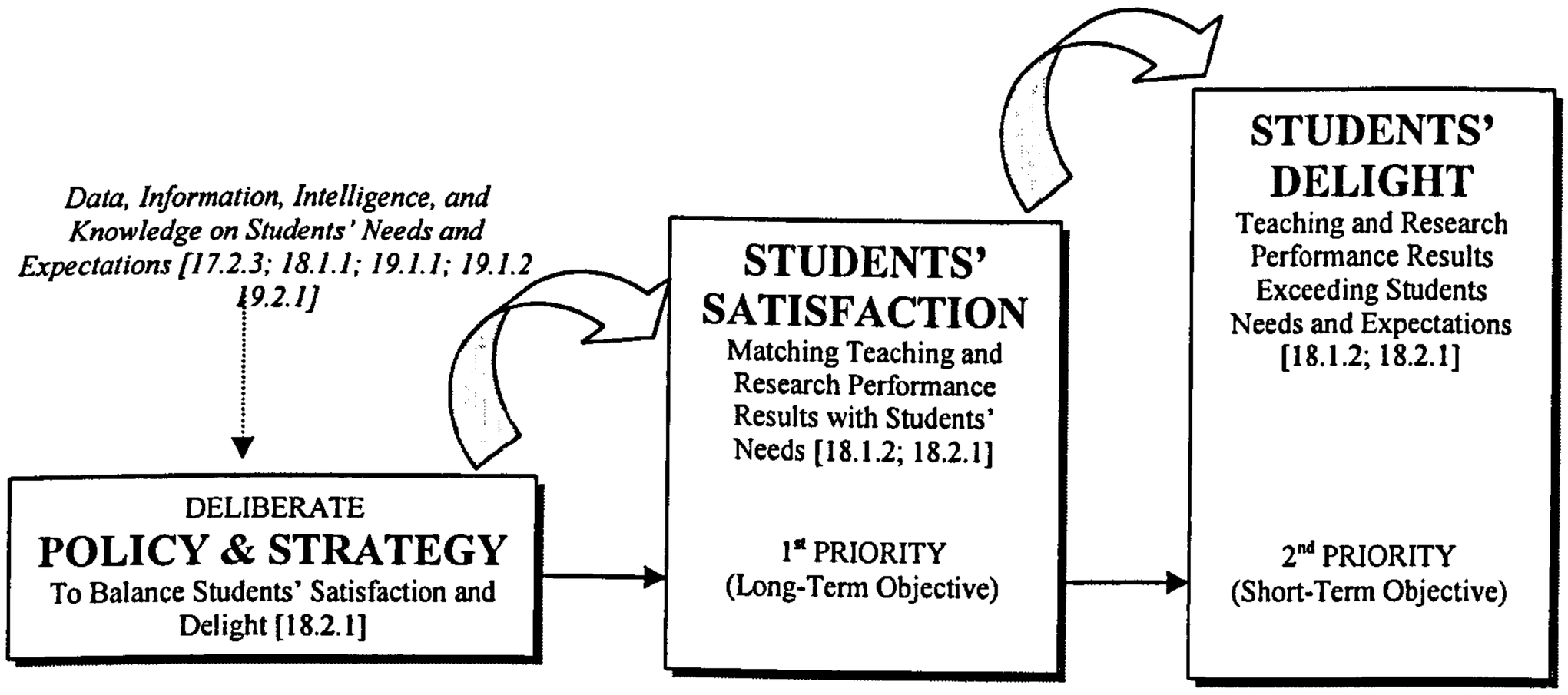


From the view point of a critical realist and a pragmatist, the 'right thing to do' in an environment of scarce funding and other teaching and research resources is not to give false impression of what an institutions can do. The right thing is to be explicitly clear on what the strengths and weaknesses are in the face of declining opportunities and increasing threats – this calls for effective collaboration and partnership relationships based on mutual understanding of the needs and expectations of each stakeholder group.

Students' Performance Results Management

Appendix C3b identifies five secondary critical success factors associated with students' results: (1) Policy and Strategy, (2) Complaints, (3) Pastoral Care, (4) Feedback Mechanisms, (5) Students' Needs and Expectations. Figure 5.12 below, places emphasis on the need for deliberate teaching and research quality improvement policies and strategies, to aim first at 'satisfying' students before 'delighting' them, in order to avoid paying lip-service to students legitimate demands. In the long-term it is more prudent to let students know which demands can or cannot be met.

Figure 5.12
Seven Secondary Critical Success Factors Linked to Students' Results Management as the Primary Critical Success Factor
Source: Osseo-Asare Jr. 2003



The source of the 'five' secondary critical success factors (CSFs) can be traced by the 'codes' under each CSF in Figure 5.12 above, which are linked to Students Results Management Practices #1, #2, and #3; and other primary critical success factors, such as 'leadership', 'policy and strategy', and 'information'. Figure 5.12, provides a

multi-dimensional framework for efficient management of students' performance results; it suggests that:

Chancellery, Deanery, and Heads of Department, need to agree on the Funding Requirements for sustaining Students Satisfaction and Delight, based on reliable Data, relevant Information, Intelligence and Knowledge of available and expected funding allocations. The objectives include maintaining required staff-student ratios, reducing work-loads, providing effective pastoral care, and motivating students in order to improve their individual performance results, and to increase student retention and completion rates.

Generating and Evaluating Alternative Strategies for Closing the Best Practice Gaps for Efficiency and Effectiveness

The Best Practice Gap (BPG) Values for Students' Results Management Practices #1, #2, and #3 are all examples of 'weak' practices. Table 5.20 below, suggests alternative strategies for closing the efficiency and effectiveness gaps.

Table 5.20
Generating Alternative Strategies for Closing Best Practice Gaps for Students' Results Management Practices #1, #2, #3
Source: Based on Table 4.7 in Chapter Four

Table 5.20A – STUDENTS' RESULTS MANAGEMENT PRACTICE #1

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Students' Results Practice #1 MONITORING AND ADDRESSING STUDENTS' COMPLAINTS **A WEAK PRACTICE**	BPG is Positive i.e.+9%, BEST Practice Zone. Resource Efficiency is at the 'Best Practice' Level.	IMPROVE Efficiency Level, by incorporating students' feedback into improvement decisions	BPG is Negative i.e. –50%, WEAK Practice Zone.	IMPROVE Effectiveness, as a matter of urgency; by acting on complaints soon as all relevant information are available. OR ABANDON Practice if not Cost-effective; and/or

Table 5.20B – STUDENTS' RESULTS MANAGEMENT PRACTICE #2

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Students' Results Practice #2 STUDENTS' SATISFACTION AND DELIGHT **A WEAK PRACTICE**	BPG is Negative i.e. -46%, WEAK Practice Zone.	IMPROVE level of Efficiency, by maintaining regular contacts with students through effective internal and external communicating systems.	BPG is Negative i.e. –40%, WEAK Practice Zone.	IMPROVE Effectiveness by prioritising objectives and targets OR ABANDON Practice if not Cost-effective; and/or

Table 5.20C – STUDENTS' RESULTS MANAGEMENT PRACTICE #3

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
3	Students Results Practice #3 INCORPORATING STUDENTS' RESULTS INTO IMPROVEMENTS **A WEAKL PRACTICE**	BPG Value is Negative i.e. -15%, which lies in the Good Practice Zone.	IMPROVE level of Efficiency, by setting and communicating realistic and achievable improvement objectives and targets.	BPG Value is Negative i.e. –60%, which lies in the WEAK Practice Zone.	IMPROVE level of Cost- Effectiveness in Matching Teaching and Research Performance Results with Students Needs and Expectations OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

Table 5.21 below, provides a link between the strategic implication of the Best Practice Gaps (BPGs) and specific tasks and activities at the operating level. It also provides a list of 11 key operational tasks and activities that academic quality management strategist need to concern themselves with in order to maintain a student-centred approach to teaching and research quality management. Table 5.22 below, which is derived from Table 5.21, provides a framework for assessing the strength of the linkages between strategic and operational factors.

Table 5.21
Key Operational Tasks and Activities of Concern to Academic Quality Management Strategist
Source: Based on Appendices, C3, C4, C5

1. Clarity of Regulations for undergraduate students [17.1.1]

2. Variation of Regulations to meet the need of the diverse student population. To do this effectively requires input from Teaching and Research Staff, Administrative and Support-service Staff, and representative of Students' Unions [17.1.2]

3. Harmonisation of Complaints Procedures to make them less bureaucratic [17.2.1]

4. Pastoral Care Systems to deal effectively with areas students are most interested in, such as: students finances, staff-students relationships, health and safety, socialisation – including

anxieties and fears of students in particular the young, disabled, from overseas, with language difficulties [17.2.2]

5. Effective management of serious academic offences and appeals relating to examinations and assignments results, and research supervision at undergraduate and post-graduate levels [17.2.3]

6. Incorporating Results from Students Satisfaction Surveys into improvement policy and strategy on timely basis [18.1.1]

7. Prioritising the needs and expectations of students [18.1.2]

8. Matching and Exceeding students expectations, in order to satisfy and to delight Students where possible [18.2.1]

9. Questionnaires designed to capture the real needs and expectations of Students [19.1.1]

10. Helping Students to effectively articulate their needs and expectations [19.1.2]

11. Timely Review of Teaching and Research Quality Improvement Policy and Strategy to allow for integration of intended strategy with emergent strategy [19.2.1]

Table 5.22
Linking Strategic with Operational Factors Relating to Data, Information, Intelligence, and Knowledge Management
Source: Osseo-Asare Jr., 2003

	Secondary CSFs Related Leadership Practices	**Specific Operational Practices Which Need to be Examined**
1	Policy and Strategy	Clarity and Variability of Rules and Regulations for the diverse range of Students
2	Complaints	Cost-effectiveness of Complaints and Appeals Procedures
3	Pastoral Care	Extent to which Students Needs and Expectations are met
4	Feedback Mechanisms	Timely and Effective Action on Feedback
5	Students' Needs and Expectations	Effectively Balancing Students' Satisfaction and Delight

Government and Other External Stakeholders' Results Management

The Government remains the main financier of publicly funded higher education institutions. Its demands for performance and quality improvement are channelled through the Department for Education and Skills and agencies such as the Quality Assurance Agency (QAA) and the Higher Education Funding Councils (HEFCs). Therefore, by meeting the improvement requirements of these stakeholders, higher education institutions are also meeting the funding requirements of the Government. Third parties such as professional and accreditation bodies, assess institutional performance on the basis of institutions' ability to meet government requirements in addition to other specialist requirements. This means, a Good Teaching Quality Assessment (TQA) and Research Assessment Exercise (RAE) results, serve a dual purpose; first, meeting the funding requirements of the Government and the performance requirements of third parties in particular accreditation bodies and other professional bodies. The recent introduction of a model for 'Institutional Review' by the QAA suggests that, the Government intends to strength its mechanism for indirect assessment of the quality of management and leadership in UK HEIs by direct assessment of the quality of teaching and research. As at now the Government does not have the appropriate mechanism for directly assessing management and leadership performance that is similar to TQM-based Excellence Models. The model developed in this doctoral research study may provide an answer to that problem.

An evaluation of the extent to which Government Policy and Strategy for Higher Education impacts on Academic Quality Improvement Policy and Strategy, confirms that, Government direct or indirect action impacts to varying degree on the quality management practices in higher education. It also suggests that, higher education institutions with similar missions, can act collectively to influence Government Policy and Strategy in their favour. From Appendix C3b, we have identified 'nine' key areas of concern for strategic quality planners in higher education - these areas are shown in Figure 5.13 below, which suggest that:

Government Policy and Strategy for Higher Education implemented by the Department of Education and Skills, the Quality Assurance Agency for Higher Education and the Higher Education Funding Councils for England, Scotland, Wales and Northern Ireland, focuses on particular areas of mission more than other areas, for the purpose of selective funding allocation. It is therefore in the strategic interest of institutions to seek to effectively manage a portfolio of mission areas comprising of Teaching, Learning, Research and Scholarship - rather than focus on one area which

may only be beneficial in the short-run - because of the strong linkage between these academic activities. This requires recruitment and retention of research-active teachers who can enhance the learning experiences of students and at the same time participate actively in scholarly activities in support of research and teaching; through a framework of core processes well designed, systematically selected, and known to deliver significant improvements in Students Satisfaction and other stakeholders results.

Figure 5.13
Key Areas of Concern for Strategic Academic Quality Planners in UK HEIs
Source: Based on Appendices C3, C4, C5, C6

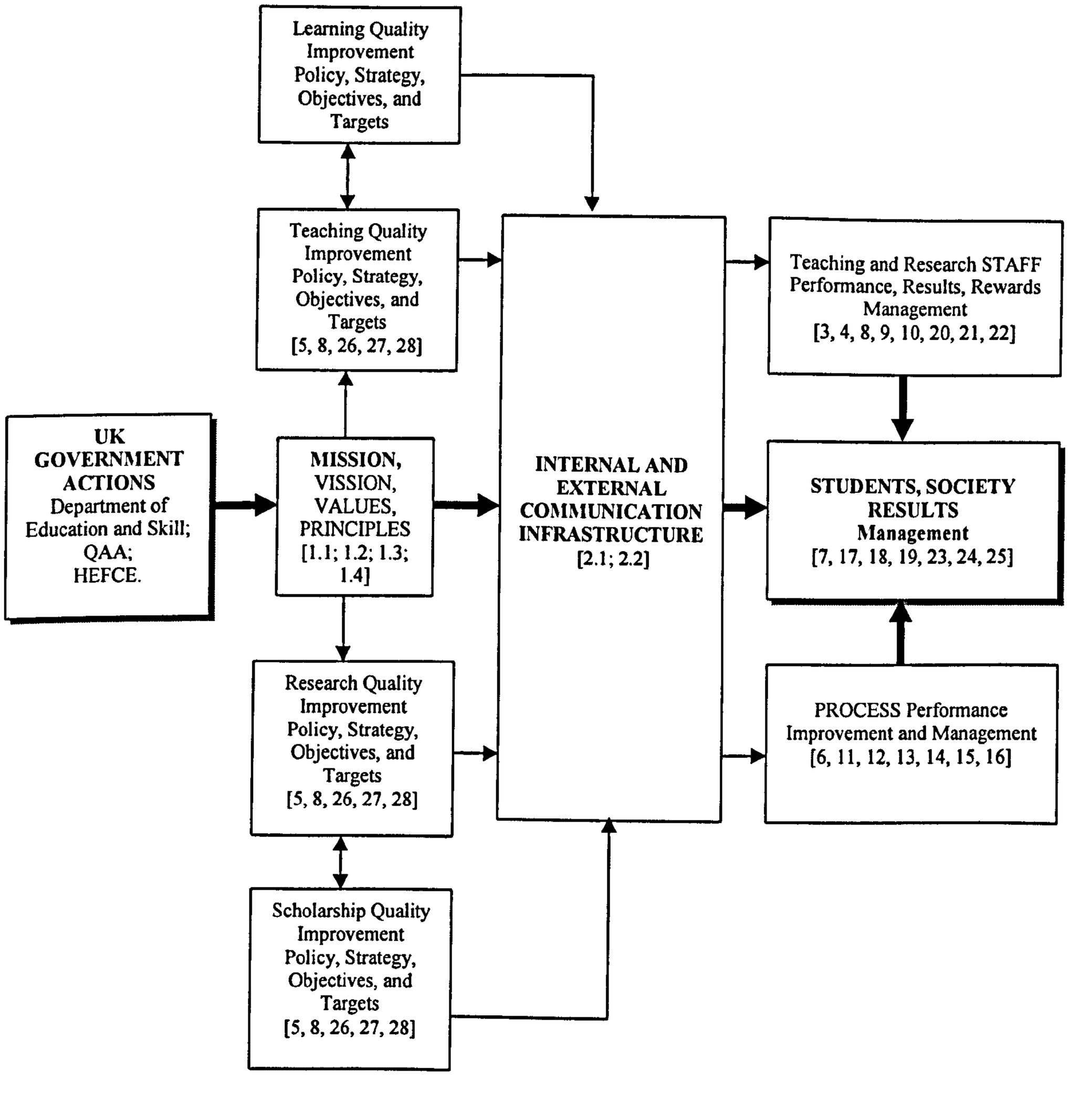


Table 5.23 below, shows how shift in Government Policy and Strategy for higher education affects 'six' main areas of academic quality management - evaluated in this doctoral research thesis. These key areas were identified from Appendix C5, and the intended and emerging strategies relate to the strategic impact of recent Government Policy and Strategy for Higher Education. The Government White Paper on the

Future of Higher Education in the United Kingdom, suggests, the Government intends to strengthen its relationship with publicly funded higher education institutions, students and employers in order to achieve its political, economic, and social objectives (DfES, 2003). Table 5.23 also provides a framework for assessing the strategic impact of Government action on inactive o institutional efforts to improve the quality of teaching, learning, research and scholarship.

Table 5.23
Impact of Government Action on Institutional Quality Improvement Strategies
Source: Based on Appendix C3, C4, C5, C6

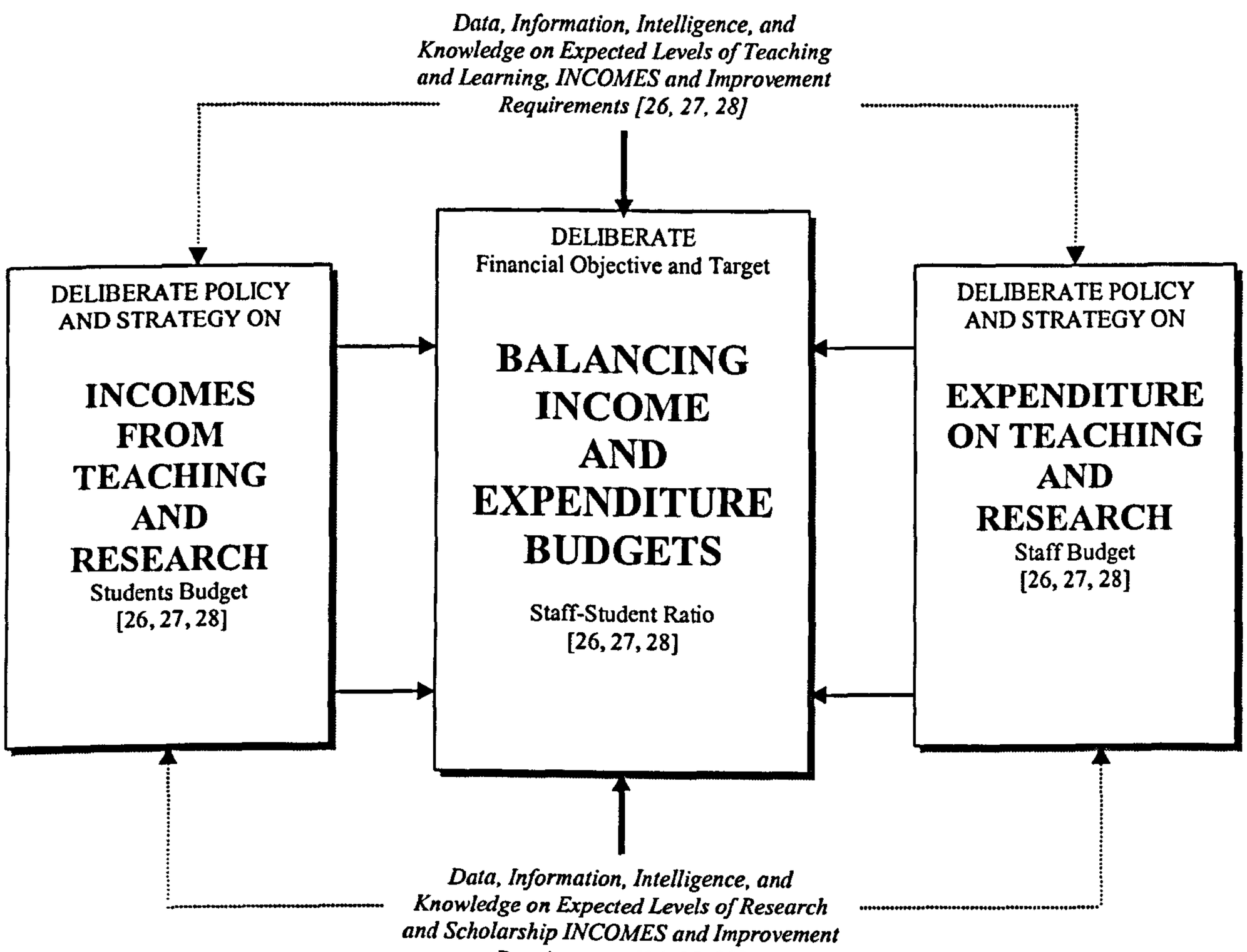
+ White Paper; ++ QAA Model, +++ HEFCE Funding Allocation, ++++ RAE Review

	Key Areas of Concern	Intended - Emerging Strategic Direction
1	Mission, Vision, Values, Principles [1.1; 1.2; 1.3; 1.4]	Increasing Selectivity in Funding Allocation suggest Integration of Teaching, Learning, Scholarship and Research: +, +++
2	Internal and External Communication Infrastructure [2.1; 2.2]	Increasing focus on Reliability of Public Information suggests integration of internal and external reporting systems to ensure Accountability to both Staff, Students, Government, Employers, Society and other External Stakeholders, in support of efforts to diversify Sources of Funding: +, ++, +++
3	Teaching and Research Staff Performance and Results Management [3, 4, 8, 9,10, 20, 21, 22]	Increasing pressure from the Government, Trade Unions and Society, edging institutions to promote Collective Consultation, suggest the need for institutions to seek to meet the needs of both Internal and External Stakeholders simultaneously in a fair manner. +, ++++
4	Teaching ad Research Quality Improvement Policy, Strategy, Objectives, and Targets [5, 8, 26, 27, 28]	QAA's Institutional Review Model for Teaching Quality Assessing and HEFCE's Model for Research Quality Assessment are increasing focusing on evidence based approach to quality management; which suggests that teaching and research quality improvement policies, strategies, objectives and targets, need to be stated explicitly, more than ever. ++, ++++
5	Process Performance Management [6, 11, 12, 13, 14, 15, 16]	Increasing focus of External Quality Assessment Models on Process Improvement at the expense of Input-Resources, suggests institutions need to effectively integrate input-resources with processes in order to deliver excellent output-results. +, ++, +++, ++++
6	Students, Society Results Management [7, 17, 18, 19, 23, 24, 25]	Increasing emphasis on reliability of information made available to Students and the general Public, suggests that institutions need to have in place an integrated Management and Marketing Information Systems for effective Internal and External Reporting. +, ++, +++, ++++

Key Institutional Performance Results Management

The assumptions outlined in this thesis clearly suggest that the adoption of a holistic and integrated model for sustaining quality improvement in UK HEIs requires a balanced mix of financial and non-financial institutional performance measures which ensures that planned expenditure on teaching and research does not exceed planned teaching and research incomes. Appendix C3b identifies 'three' secondary critical success factors associated with institutional performance results: (1) Balancing Incomes and Expenditure Budgets for Teaching and Research, *(2) Maintaining appropriate Staff-Student Ratios, and (3) Sustaining Funding Increases for Teaching and Research* - shown in Figure 5.14 below.

Figure 5.14
Secondary Critical Success Factors Linked to Effective Management of Institutional Results
Source: Osseo-Asare Jr. 2003



The source of the 'three' secondary CSFs can be traced by the 'codes' under each CSF in Figure 5.14 above, which are linked to Institutional Results Practices #1, #2, and #3; and other primary critical success factors, such as 'leadership', 'information',

'funding', 'staff management', students' results, and 'government results'. What Figure 5.14 above suggests is that:

Planned levels of Teaching and Research Quality improvement should match required levels of teaching and research incomes and funding; to ensure that, expected levels of improvement are actually achieved. The levels of expected incomes and funding, and predetermined levels of improvement should be based on reliable Data, relevant Information, Intelligence and Knowledge. The objective is to ensure that statements of intent are not expressed as statements of practice, and that, the principles of accountability to stakeholders are upheld.

Generating and Evaluating Alternative Strategies for Closing the Best Practice Gaps for Efficiency and Effectiveness

The Best Practice Gap (BPG) Values for the three Institutional Results Practices, suggest that Practice #1, #2, and #3 are examples of 'weak' practices. Table 5.24 below, generates alternative strategies for closing the BPG Gaps.

Table 5.24
Generating Alternative Strategies for Closing Best Practice Gaps for Institutional Results Practices #1, #2, #3
Source: Based on Table 4.10

Table 5.24A – INSTITUTIONAL RESULTS PRACTICE #1

	PRACTICES	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
1	Institutional Results Practice #1 BALANCED BUDGETS **A WEAK PRACTICE**	BPG is Positive i.e.+16%, and lies in the EXCELLENT Practice Zone. Managerial Efficiency may not be sustainable at this Level of Excellence.	REDUCE BPG to Optimal Efficiency Level, by implementing a balanced mix of financial and non-financial performance measures.	BPG Value is Negative i.e. –65%, which lies in the WEAK Practice Zone. IMPROVE level of Effectiveness, as a matter of urgency.	IMPROVE Effectiveness, through Cost-Effectiveness and Budgetary Controls. OR ABANDON Practice if not Cost-effective; and/or INTRODUCE new practice

Table 5.24B – INSTITUTIONAL RESULTS PRACTICE #2

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
2	Institutional Results Practice #2 STAFF-STUDENT RATIOS **A WEAK PRACTICE**	BPG Value is Negative i.e. –46%, which lies in the WEAK Practice Zone.	IMPROVE level of Efficiency, by ensuring that Forecast of Teaching and Research Incomes and Funding are based on accurate data and relevant information.	BPG Value is Negative i.e. –60%, which lies in the WEAK Practice Zone. IMPROVE level of Effectiveness, as a matter of urgency	IMPROVE Effectiveness, by ensuring the Teaching and Research Quality Improvement Objectives and Targets are Realistic, Achievable and justified by Expenditure. OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices

Table 5.24C – INSTITUTIONAL RESULTS PRACTICE #3

	PRACTICE	Importance Gap BPGs	ACTION	Effectiveness Gap BPGs	ACTION
3	Institutional Results Practice #3 SUSTAINING FUNDING INCREASES **A WEAK PRACTICE**	BPG Value is Positive i.e. +1%, which lies in the BEST Practice Zone.	IMPROVE level of Efficiency, by aggressive defence of Planned Expenditure Budgets.	BPG Value is Negative i.e. –49%, which lies in the WEAK Practice Zone.	IMPROVE Effectiveness based on track record of Cost-Effectiveness and Value for Money OR ABANDON Practice if not Cost-effective; and/or OR INTRODUCE new Practices

Establishing a Link between Strategic Issues and Operational Factors to facilitate Implementation of Best Practices

Table 5.25 below, provides a link between the strategic implication of the Best Practice Gaps (BPGs) and specific tasks and activities at the operating level. It also provides a framework for evaluating the strength of the association between strategic and operational factors.

Table 5.25
Linking Strategic with Operational Factors Relating to Institutional Results Management
Source: Osseo-Asare Jr., 2003

	Secondary Critical Success Factors	**Specific Operational Practices Which Need to be Examined**
1	Teaching and Research Performance Measure	Using a Balanced set of Financial and Non-financial Performance Measures
2	Track Record of Balancing Budgets	Trends in meeting Teaching and Research Budgets – Staff-Student Ratios
3	Extent of Deviations from Improvement Objectives	Gaps in Planned and Actual Performance Results – TQA, RAE Results
4	Maintenance and Investment in Infrastructure	Value of Teaching and Research Infrastructure Funding Backlogs
5	Dealing with Liquidity Problems	Accuracy and Reliability of Cash flow Forecasts

Summary of Theory Creation and How the Theory can be used to Improve the Efficiency and Effectiveness of Autonomy and Accountability Criteria

First, the theory created in Section [5.1] comprises of the three main component parts

- *24 concepts and principles in Table 5.2 on page 302,*
- *16 assumptions presented on pages 304 - 306;*
- *A statement of theory and definition of terms of reference, which relates the theory to the 'autonomy' and 'accountability' criteria.*

These component parts of the theory were derived from the associations between CSFs and best practices in Appendices C3, C4, C5, and C6. The process of theory creation has been described as 'inductive' because it is based on 'meaning' grounded in the empirical relationships identified in this study between CSFs and best practices. Second, the notion of 'best practice gaps' (BPGs) was introduced as a tool for generating alternative strategies for closing perception gaps. The strategic implications of the 'three' possible BPG-values are outlined below:

- *A 'positive' BPG-value suggests the quality management practice being evaluated is both 'efficient' and 'effective' in delivering sustained improvement in teaching and research quality. The alternative strategies for closing any perception gap are 'maintain' and/or 'improve' on current practice.*
- *A 'negative' BPG-value suggests the practice is not 'efficient' and 'effective' therefore 'improve' or 'abandon' practice and/or 'introduce' a new practice.*
- *A 'zero' BPG-value suggests the quality management practice is both moderately 'efficient' and 'effective' therefore needs to be 'improved', 'abandoned', and/or 'introduce' new practice.*

Finally, in order to achieve the primary research objective of developing an alternative model for academic quality management, this section further developed the frameworks for effective management of 'autonomy' and 'accountability' criteria into a number of 'secondary' models or 'building blocks' for the final model. We therefore have 'five' building blocks for autonomy criteria and 'three' for 'accountability' criteria as listed under Figure 5.2, and summarised below:

***Autonomy Criteria**: (1) managerial leadership; (2) data, information; (3) Funding; (4) staff management; (5) framework of core processes. **Accountability Criteria**: (1) students' results; (2) government results and (3) institutional results.*

The next section combines these 'building blocks' into the final model in order to achieve the primary doctoral research objective.

5.2

Development of an Alternative Model for Sustaining Academic Quality Improvement

"The mission of the Quality Assurance Agency for Higher Education is to promote public confidence that quality of provision and standards of awards in higher education are being safeguarded and enhanced. The Agency does this by...promulgating codes of practice and examples of good practice." (QAA, 2002b:i)

This section combines the building blocks developed in Section [5.1] into a 'composite' or holistic and integrated model for quality in higher education. The model is structured on two sets of criteria: the 'autonomy' and 'accountability criteria'. The philosophical and empirical assumptions behind the model have been described previously, but the key question is 'how the model can help sustain academic quality improvement'. This is achieved through the application of 'six' key principles derived from the various frameworks for effective management of the primary CSFs identified in this thesis. These principles are outlined as follows:

1. *Managerial leadership at the chancellery, deanery, and heads of departments need to determine departmental and institutional teaching and research quality improvement results – for instance, Teaching Quality Assessment (TQA) and Research Assessment Exercise (RAE) Results - it is aiming for from its Academic Quality Improvement Policy and Strategy;*

2. *Teaching and Research Quality Improvement Policy, Strategy, Objectives and Targets should be determined using accurate and reliable data, relevant information, intelligence and knowledge gained overtime;*

3. *Acquisition, allocation, and utilisation of Funding and other resources in support of Teaching, Learning, Scholarship and Research, should be effectively planned for proactively, and not left to chance, taking into account elements of risk and uncertainty in relation to the cost of capital;*

4. *Efficient funding allocation and utilisation depends on retention of dedicated and well motivated teaching and research staff, supported by administrative and support-service staff who are equally motivated and empowered to sustain process improvement;*

5. *Design of Processes should be based on systematic identification, evaluation, selection and implementation of quality improvement tasks and activities, that have been proven to deliver significant improvement in students, government, potential employers, staff, and other internal and external stakeholder performance results;*

6. *Performance Gaps based on the notion of Best Practice Gaps (BPGs) should be acted upon on retrospectives and prospectively through a feedback and feed-forward mechanism, to ensure rapid response to changes in critical success factors in the internal, external and competitive environment in which institutions operate.*

These 'six' principles are consistent with the RADAR principles derived from Deming's PDCA cycle, which is at the heart of the EFQM Excellence Model. The first acronym 'RADAR' stands for R = results, A = approach, D = deploy, A = assess, and R = review; and the second acronym 'PDCA' stands for P = plan, D = do, C = check, and A = act. The above six principles is inspired by both the RADAR and PDCA principles because they place emphasis on deliberate *planning* through setting realistic objectives, *deployment* of approaches based on a framework of core processes proven to deliver superior *results*, and *assessment* and *review* of performance results.

5.2.1. The Model Structure

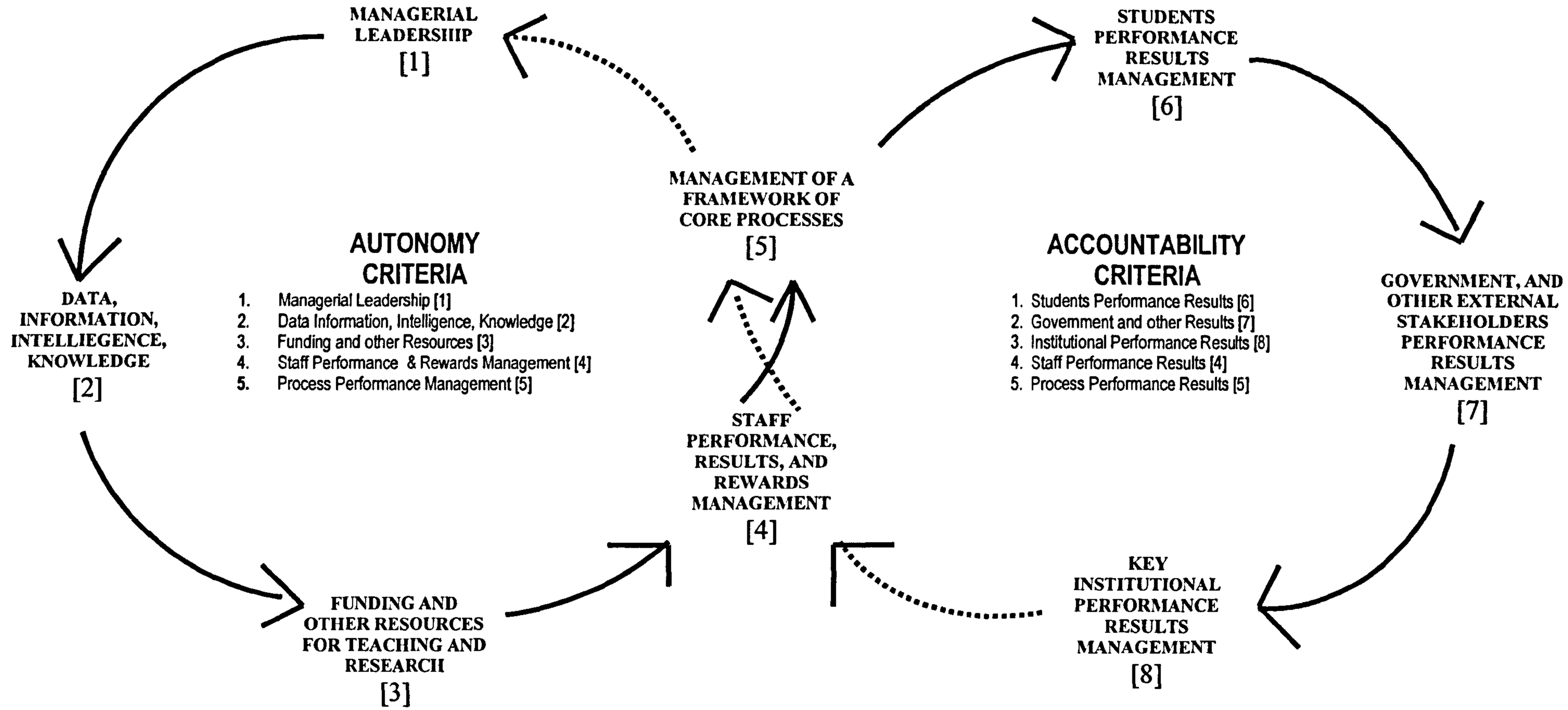
The model in Figure 5.15 below is a diagrammatic representation the final model comprising of 'eight' main criteria that are separated into two main groups, *autonomy-criteria* and *accountability-criteria:*

- The 'five' autonomy-criteria comprise of: *managerial leadership (1), data, information, intelligence, and knowledge (2), funding and other resources (3), staff performance and rewards management (4), and process performance management (5).* They represent the things higher education institutions need to efficiently and effectively manage in order to meet the requirements of the autonomy-criteria.

- The 'three' accountability-criteria comprise of *Students Results (6), Government Results (7), and Institutional Results (8).* They represent the things higher education institutions need to efficiently and effectively manage in order to meet the requirements of the accountability-criteria.

Other 'accountability' criteria notably s*taff results* and p*rocess results* are considered to be part of Staff and Process Performance Management respectively. The 'autonomy' criterion *'Data and Information'* reinforces the theme of innovation and learning through *retrospective* and *prospective* approaches consistent with feedback and feed-forward mechanisms respectively - represented in Figure 5.15 by the 'dotted lines'. The model depicts an approach to quality improvement based on systems thinking, with mechanisms for feeding back and forwards. The arrows depict a thought process or mindset in constant motion not static, responding to changes in the external environment in a planned continuous manner not ad hoc and unplanned - the goal is to sustain academic quality improvement and not one off excellent results.

Figure 5.15
Model for Sustaining Academic Quality Improvement in UK Higher Education
Source: Osseo-Asare Jr. 2003



5.2.2. The 'Model' as a 'Tool' for Self-assessment in UK Higher Education

The model in Figure 5.15 according to the definition of the term 'model' used in this thesis is an abstract representation of the reality prevailing in UK higher education institutions based on the empirical research data. The model can be transformed into a 'tool or technique' for self-assessing the quality of teaching and research in individual institutions - at both macro and micro levels. To facilitate the process of transforming the 'model' into an assessment 'tool', Table 5.26 below, provides a checklist of the model's *main* and *subsidiary* assessment criteria.

Table 5.26
Check List of Main and Subsidiary Critical Success Factors
Source: Based on Appendices C3, C4, C5

	MAIN CRITERION Primary Critical Success Factors [Appendix C3a]	SUB-CRITERION Key Secondary Success Factors [Appendix C3b, C4, C5]
1	**Managerial Leadership for Academic Quality Management** *Managers in Leadership position combine efficiency and effectiveness by doing the right things right first time*	Mission, Vision, Values, Principles, Policy, Strategy, Objectives, Targets
		Internal and External Communication Infrastructure
		Staff Empowerment, Motivation, Leadership, Support, Encouragement, Recognition and Rewards
		Dealing with issues of Diversity and Equality
		Process Ownership and Improvement
		Data, Information, Intelligence, Knowledge-Based Decision-making
		Academic Freedom and Institutional Autonomy
		Continuous Improvement through Value for Money
		Vision of National and International Academic Excellence through Academic Quality
2	**Data, Information, Intelligence, Knowledge for Academic Quality Management** *Teaching and Research Quality Improvement Policy, Strategy, Objectives and Targets are based on reliable data, relevant information, intelligence and knowledge*	Data, Information, Intelligence, Knowledge-Based Decision-making
		Deployment of Quality Improvement Policy and Strategy
		Dedicated Marketing Department leading communication of brand and reputation
		Systems for capturing feedback from students, staff and other internal and external stakeholders
		Implementing an Open Two-way Communication Policy and Strategy
		Cross-Institutional Networks for sharing Best Practices
		Networks for Internal Transfer of Best Practices
		ICT infrastructure for academic and administrative operations
		Regular Maintenance and Increased Investment in ICT infrastructure
		Development of a Learning and Knowledge Institution, Society and Economy
		ICT Support for Teaching and Research Staff
3	**Funding and other Resources for Teaching and Research Quality Management** *Ensuring there is continuous flow of Funding and other Resources in support of Planned Teaching and Research Quality Improvement activities*	Creating and Sustaining Synergies
		Funding to support Professional Development of Staff
		Acquisition of Funds
		Efficient Allocation of Funds for Teaching and Research Quality Improvement
		Utilisation of Funds linked to degree of certainty about Funding and Staff Levels
		Diversification of Sources of Funding
		Teaching and Research Areas of Weaknesses Needing Funding
		Strong Budgetary Support
		Decentralised Staff Development Budgetary Systems
		Management of Students and Staff Finances
4	**Staff Performance, Results, and Rewards Management or Academic Quality Management** *Retaining a well motivated Academic and Non-academic Staff with the skill and knowledge to ensure Continuous Process Improvements*	Staff Performance Appraisal Systems
		Staff Empowerment
		Staff Support
		Implementing Equal Opportunity and other and Anti-discrimination Policy and Strategy
		Level of Staff Involvement and Participation in setting Improvement Objectives and Targets
		Linkage between Staff Performance and Reward Systems
		Staff Policy and Strategy
		Staff Leadership Training and Development
		Staff Motivation through Participation in key Improvement Decisions
		Staff Rewards

Table 5.26 - CONTINUATION
Check List of Main and Subsidiary Critical Success Factors
Source: Based on Appendices C3, C4, C5

	MAIN CRITERION Primary Critical Success Factors [Appendix C3a]	SUB-CRITERION Key Secondary Success Factors [Appendix C3b, C4, C5]
5	**Process Performance and Results Management for Academic Quality** *Maintaining a framework of well designed core Processes known to deliver superior internal and external Stakeholder Results*	Maintaining the Framework of Core Processes
		Identifying and Selecting Core Processes
		Process Ownership for Improvement
		Job Descriptions
		Staff Recognition and Rewards
		Continuity of Process Improvements
		Sustainability of Continuous Process Improvement
		Processes for Supporting and Addressing Staff Welfare Issues
		Effective Documentation of Processes to enhance Process Design
6	**Students Performance Results Management** *Ensuring that Teaching and Research Performance Results Match and Exceed Students Needs and Expectations as Customers*	Incorporating Students' Results into Improvement Activities
		Regulations and Procedures
		Monitoring and Addressing Students' Complaints, Appeals and Offences
		Students Satisfaction Surveys
		Students Delight Surveys
		Feedback Methodologies
		Improvement Policy and Strategy Formulation
		Strategies for Handling Staff-Student Complaints
		Facilities for Teaching Students with Disabilities
7	**Government Performance Results Management** *Maximisation of Levels of Funding Allocation by delivering Best in Class Teaching and Research Performance Results*	Health and Safety Concerns
		Impact on Local and National Economy
		Ethical Behaviour
		Environmental Concerns
		Social Re-engineering
		Economic Regeneration
		Professionalism
		Intellectual Capital
8	**Key Institutional Performance Results Management** *Ensuring that the Costs of Teaching and Research Quality Improvement are matched by the Financial and Non-financial Benefits derived from the improvement*	Balanced Budget
		Staff-Student Ratio
		Sustaining Funding Increases
		Teaching Budget and Teaching Assessment Results
		Decentralised Staff Development Budgetary Systems
		Research Budget and Research Assessment Results
		Motivation of Staff, Students and other Internal and External Stakeholders
		Students Learning Experience
		Liquidity Problems
		Investment in Teaching and Research Infrastructure

The 'main' assessment criteria are represented by 'five' autonomy' or 'enabler' criteria, and 'three' 'accountability' or 'results' criteria; the subsidiary assessment criteria are represented by a number of secondary critical success factors associated with each primary critical success factor. The subsidiary criteria are in turn linked to the specific tasks and activities listed in Appendix C4 and C5. The strategic implication of these linkages is that, the assessment of each main criterion should be based on a top-down and bottom-up approach. This means any 'weaknesses' in a main criteria may be caused by 'weaknesses' in one or more subsidiary criteria, which in turn leads to identification of 'weaknesses' in specific quality improvement tasks and activities at the operating level. The identification of 'weaknesses' in these

criteria and 'weaknesses' in specific tasks activities; should provide useful data and information required for designing of new teaching and research processes and/or redesigning of existing ones. The empirical evidence provided by this doctoral research study confirm that, an association exists between 'primary' and 'secondary' critical success factors on one hand, and on the other hand between these factors and the specific tasks and activities at the operating level. Even though this study shows that, the associations may be described as 'probabilistic' rather than 'deterministic' causality; there is clear indication that the relationships are not static, but dynamic, and need to be monitored on regular basis to ascertain their exact nature for effective quality improvement decision-making.

Finally, the 'model' as a 'tool' for self-assessment or evaluation of teaching and research quality improvement can be used by the QAA or and independent body as basis for rewarding institutions for promoting academic excellence through sustained improvement in quality. This can be achieved by adopting the autonomy and accountability criteria as basis for performance excellence. It will require the use of a scoring mechanism and allocation of points to each criterion - a total score of 1000 points could be adopted similar to the total scores used by the EFQM and MBNQA self-assessment methodologies. Further research is however, required to help establish the rank of each 'autonomy' and 'accountability' criterion; and the number of points to allocate to each criterion. A self-assessment methodology based on the 'award criteria' could then be carried out periodically, followed by an 'award' for academic excellence by the external body given the award - similar to the procedure adopted by the EFQM and MBNQA. This demonstrates the distinction between 'models', 'tools and techniques', and 'award criteria'.

Summary of How a Model was Development from the Theory Created

Section [5.2] showed how the well-known RADAR and PDCA principles inspired the introduction of 'six' principles from the frameworks developed for effective management of autonomy and accountability criteria. The two sets of criteria were then put together 'diagrammatically' on the following basis:

- *That 'autonomy' criteria represent 'means' and 'accountability' criteria represent 'ends';*

- *That the relationship between the two sets of criteria is dynamic not static as represented by the arrows moving in a circular manner;*
- *That there is a need to monitor the critical success factors(CSFs) under each criteria in order to assess the nature of the relationships between the CSFs and the each criterion;*

The distinction between 'models', 'tools and techniques', and 'award criteria' was established and used to explain the contribution the model developed in this study makes. This is outline in three ways:

- *First, the primary objective of this research study was to develop a 'model' from theory, and not a 'tool or technique' for self-assessment.*
- *Second, the 'model' at this stage remains conceptual and will be transformed into a self-assessment tool after the underpinning theory has been tested as part of a post-doctoral study.*
- *Third, the second point above suggests that, use of the 'tool' as an 'award criteria' can only be decided after this study. It is expected that a sponsoring organisation - intending to reward academic excellence - might decide to use the self-assessment methodology created from the model as an 'award criteria'. This possibility will be investigated as part of a post-doctoral study.*

5.2.3. Summary of Chapter Five and Link with Chapter Six

Chapter Five exposed the logical steps in the creation of theory and subsequent development of an alternative model for sustaining quality in higher education in general and in particular UK higher education institutions. The *theory* is described as inductively derived because it is based on the meaning grounded in the empirical data collected. It comprises of 24 concepts and principles, 16 assumptions and an explicit statement of theory and definition of the terms of reference. The theory creation led to the application of the notion of *best practice gaps* (BPGs) to generate alternative strategies for closing perception gaps. A 'positive' BPG-value is an indication that, overall, quality management practices are satisfactory but some improvement is needed; a 'negative' BPG-value suggests that, current practices are unsatisfactory and may need to be abandoned and/or replaced with new practices or improved upon. A 'zero' BPG-value represents a 'borderline' case, suggesting that, current practices need to be improved, abandoned and/or replaced.

The *model* developed from the above theory is essentially conceptual and has to be tested before full-scale implementation in individual higher education institutions.

The model is constructed from 'five' autonomy criteria and 'three' accountability criteria. The model may therefore, be correctly described in two ways, first as 'autonomy-accountability' model, and second as 'academic quality management' model. To highlight the model's contribution to knowledge, a distinction has been made between the terms 'model', *tools and techniques*, and *award criteria*. At this stage the 'model' remains conceptual, but has the potential of being developed into a self-assessment 'tool and technique' as part of an 'award criteria'. The model can be described as a 'composite' academic quality management model because it comprises a number of 'secondary' models used as 'building blocks':

- *The 20 Dimensions of Managerial Leadership - Figure 5.3.*
- *Seven Secondary CSFs linked to Data, Information, Intelligence and Knowledge - Figure 5.5.*
- *Seven Secondary CSFs linked to Funding for Teaching and Research Quality - Figure 5.6.*
- *Seven Secondary CSFs linked to Staff Performance Management - Figure 5.7*
- *A Framework of Core Processes derived from Pool of Tasks and Activities - Figure 5.9*
- *Balancing the Needs & Expectations of Internal & External stakeholders in UK HE - Figure 5.11*
- *Seven Secondary CSFs linked to Students' Results Management - Figure 5.12*
- *Key Areas of Concerns for Strategic Academic Quality Planners in UK HEIs - Figure 5.13.*
- *Secondary CSFs linked to Effective Management of Institutional Results - Figure 5.14.*

Finally, the creation of theory and development of a conceptual model confirmed that, both the 'primary' and 'secondary' doctoral research objectives have been achieved. That is to say, the identification of critical success factors (CSFs); the best practices linked to the CSFs; explanation of the associations between CSFs and best practices, led to creating of theory and subsequent development of a conceptual model for sustaining quality improvement in UK HEIs. The next chapter, concludes the thesis, offers recommendations for improving the efficiency and effectiveness of quality management practices in higher education institutions, and also identifies areas for further research at the post-doctoral level.

chapter|six

CONCLUSIONS AND RECOMMENDATIONS

Chapter Six provides conclusions and recommendations that demonstrate the critical work undertaken and the original contribution of the doctoral research study. It comprises of two sections: Section [6.1] provides a summary of the conclusions drawn from each chapter; reflects on the extent to which the primary and secondary research objectives have been achieved; comments on the critical realists perspectives on validity, reliability and generalisability of the doctoral research findings; and provides an outline of the significance of the thesis' contribution to knowledge. Section [6.2] provides a set of recommendations and highlights areas for further research at a post-doctoral level. The overall aim is to demonstrate the critical work undertaken and the original contribution of the doctoral research study.

"As universities competing internationally we are acutely aware of our funding falling behind that of our competitors. As government funding is not forthcoming, student fees are the only game in town" (Sterling, 2003:2)

6.1

Highlighting the Doctoral Research Thesis Major Contribution to Knowledge

"Governments across Europe are agreed on...emphasising balance between institutions autonomy and external accountability, innovation, managed diversity and avoiding cost bureaucracy. UK universities may subscribe to this, but disagreement remains over the needs of a European benchmark for world-class universities "(THES, 2003c:12)

This section first, provides a summary of the conclusions drawn from each chapter of the thesis in order to highlight the thesis' major contribution to knowledge. Second, it reflects on the extent to which the primary and secondary research objectives have been achieved. This would help identify weaknesses in this research study and would provide a base for identifying areas for further research at a post-doctoral level. Third, it comments on the critical realist's stance taken on issues of validity, reliability and generalisability of the doctoral research findings. Lastly, it provides an outline of the significance of the thesis' contribution to knowledge.

Introduction and Critique of Existing Literature

Chapter One provides an introduction to the thesis, and a critical commentary of existing literature. The introduction identified a number of strategic reasons for researching quality in higher education at the doctoral level. The main conclusions drawn from the various reasons offered are:

- *That, it is in the long-term interest of individual higher education institutions to seek to improve on the quality of teaching and research, in order to sustain the interest of internal and external stakeholders and levels of funding.*

- *That, individual higher education institutions should deal with the controversy about the meaning and relevance of quality in the future development of the system of higher education, in order to balance the requirements for institutional autonomy and external* accountability.

The critique of existing literature led to the following conclusions:

- *That, there is a significant gap in the theory and practice of quality management in higher education institutions;*
- *That, the gap in theory and practice relates to differing perceptions about the meaning and relevance of quality in a higher education environment;*
- *That, the gap in theory and practice is underpinned by critical success factors from the internal, external, and competitive environment in which higher education institutions operate.*

These gaps in theory and practice were explicitly defined and expressed in terms of statements of research problems and research questions, which led to a review of the alternative research methodologies in Chapter Two.

Critique of Existing Research Design and Methods

Chapter Two reviewed existing literature on alternative research methodologies in terms of research philosophy, approach, strategy, methods and instruments. This forensic examination of methodology led to the following conclusions on the choice of research design and methods for this research study:

- *That, the identification of critical success factors (CSFs) - relating to the gaps in theory and practice - from various sources requires a mix research design, methods and instruments;*
- *That, critical realism, pragmatism, or coherenticism as espoused by Tashakkori and Teddlie (1998) and Evers and Lakomski (2001) encourage the use of mix research design, methods, and instruments;*
- *That, the use of both Questionnaires at the exploratory phase of the research survey and Semi-structured interviews at the conclusive phase of the survey is appropriate for collecting both quantitative and qualitative empirical data, which were later presented and analysis;*
- *That, the quantitative and qualitative data collected can be analysed concurrently using statistical and inductive techniques of analysis as demonstrated in Chapter Three.*

Data Presentation and Analysis

Chapter Three presented the empirical data collected using SPSS and Microsoft Excel tables, pie charts, and bar charts; line graphs were presented in Chapter Four. The quantitative data were exposed to some simple statistical analysis involving the use of modal frequencies and hypothesis testing of the functional relationship between the degree of importance and the degree of effectiveness of the quality management

practices under study. The qualitative data were analysed using simple inductive technique of coding, which helped in the identification of themes and the relationships between themes - as basis for theory creation in Chapter Five. The statistical analysis led to the following conclusions:

- *That, the functional relationship between the degree of importance and the degree of effectiveness is linear for most quality management practices evaluated and non-linear for a few examples;*

- *That, quality management practices relating to policy and strategy, staff management, resources, processes, student results, and society results exhibit linear relationships. This is confirmed by the test statistics which show that, t-calculated is greater than the t-critical of 2.0211 for a two tailed t-distribution, with alpha value of $\alpha = 0.05$ i.e. 95% level of significance, and degrees of freedom $(n - 2) = 40$. In this examples the null hypothesis (Ho: $\rho = 0$) was rejected;*

- *That, quality management practices relating to leadership, staff, and institutional results are examples of non-linear relationship. This is confirmed by the test statistics which show that t-calculated is less than the t-critical of 2.0211. In this examples the null hypothesis (Ho: $\rho = 0$) was accepted. Whether or not the relationship can be described as curvi-linear requires further research.*

The inductive analysis on the other hand led to the following conclusions:

- *That, respondents' and interviewees' have different perceptions of the degree of importance or efficiency and the degree of effectiveness of their quality management practices;*

- *That, context is critical if a 'model' or a 'tool' for quality assessment and management is to be successfully implemented in a higher education institution;*

- *That, accurate measurement of perception gaps will help generate alternative strategies for closing quality gaps, where quality gaps are defined in terms of gaps in the degree of importance and the degree of effectiveness of a practice. How this can be achieved is discussed under Chapter Four.*

Discussion of Empirical Results

Chapter Four discussed the empirical results by focussing on the relationships between the degree of importance and the degree of effectiveness of the quality management practices evaluated under Questionnaire Part Two. The following conclusions have been drawn from the discussions:

- *That, perception gaps defined in terms of gaps in the degree of importance and gaps in the degree of effectiveness, provide a basis for categorising quality management practices into 'weak', 'good', 'best', and 'excellent' practices;*

- *That, a 'weak' practice is a practice that is deemed 'less' importance and 'less' effective in delivering sustained improvement in the quality of teaching and research;*

- *That, a 'good' practice is 'highly' important and 'moderately' effective;*

- *That, a 'best' practice is 'highly' important and 'highly' effective;*

- *That, an 'excellent' practice has a 'very high' degree of importance and a 'very high' degree of effectiveness.*

The use of the above definitions led to the introduction of the notion of Best Practice Gap (BPG), and Osseo-Asare Scoring Mechanism for generating alternative strategies for closing perception or quality gaps. Finally, the associations between the degree of importance and the degree of effectiveness, and by implication between critical success factors and best practices led to the development of a number of frameworks for effective management of *autonomy* and *accountability* criteria as listed below:

- ***Managerial Leadership*** *- Figure 4.4, pp.223*
- ***Policy and Strategy*** *- Figure 4.5, pp. 232*
- ***Staff Management*** *- Figure 4.6, pp.241*
- ***Management of Resources*** *- Figure 4.7, pp.249*
- ***Process Management*** *- Figure 4.8, pp. 258*
- ***Management of Students' Results*** *- Figure 4.9, pp. 269*
- ***Management of Staff Results*** *- Figure 4.10, pp. 277*
- ***Management of Society Results*** *- Figure 4.11, pp. 285*
- ***Management of Institutional Results*** *- Figure 4.12, pp. 293*

Chapter Five explained how the above frameworks led to the creation of theory and development of a model for academic quality management.

Interpretation of Empirical Research Findings

Chapter Five, first showed how 24 concepts and principles, 16 assumptions, a statement of theory, and definition of terms of reference were derived from the pools of critical success factors (CSFs) and Best Practices presented under Appendices C3a, C3b, C4, C5 and C6. Second the notion of Best Practice Gap (BPG) introduced earlier in Chapter Four is used to generate alternative strategies for all the 28 quality management practices evaluated in this study. The conclusions that have been drawn from this are:

- *That, a quality management practice with a 'positive' BPG-value should be retained and improved upon by increasing its relative importance and relative effectiveness in delivering sustained improvement in teaching and research quality;*
- *A practice with a 'negative' BPG-value should be improved upon, or abandoned and /or introduce a new practice;*

- *A practice with 'zero' BPG-value should be improved upon, or abandoned and/or introduce a new practice.*

The theory developed above was used to categorise CSFs and Best Practices into two main criteria for designing the model structure, which are autonomy and accountability criteria. Each criterion comprises of the set of building blocks below:

Autonomy Criteria

1. **The 20 Dimensions of Managerial Leadership** - Figure 5.3, pp. 315
2. **7 Secondary CSFs linked to Information** - Figure 5.5, pp. 324
3. **7 Secondary CSFs linked to Funding** - Figure 5.6, pp. 328
4. **7 Secondary CSFs linked to Staff Performance Management** - Figure 5.7, pp. 332
5. **A Framework of Core Processes** - Figure 5.9, pp. 339

Accountability Criteria:

1. **7 Secondary CSFs linked to Student Results** - Figure 5.12, pp. 345
2. **Key Areas of Concern for Strategic Academic Quality** - Figure 5.13, pp. 350
3. **Secondary CSFs linked to Effective Management of Institutional Results** - Figure 5.14, pp. 352

The conclusions drawn from the above are:

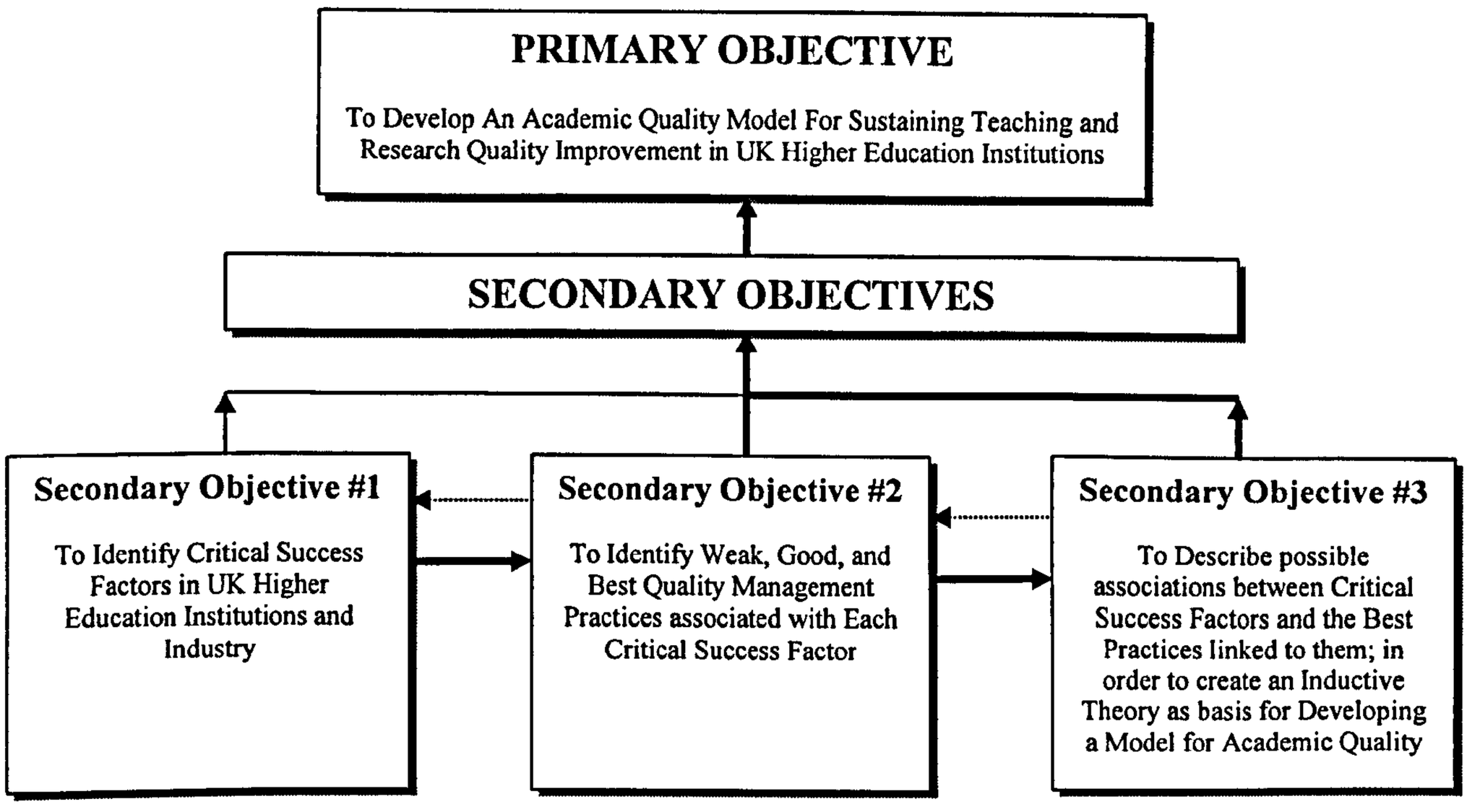
- *That, the model structure should be based on the autonomy and accountability criteria because respectively they represent 'means' and 'ends' from systems perspective;*
- *That, the 'five' autonomy and 'three' accountability criteria may be used as self-assessment criteria if the 'model' is later developed into a 'tool' for assessing the quality of teaching and research.*

6.1.1. Extent to which the Doctoral Research Objectives Have Being Achieved

Figure 6.1 below shows the hierarchical relationship between the three secondary objectives and the primary objective, which suggests that, the secondary objectives have to be achieved first in order to achieve the primary objectives. It also shows that Secondary Objective #1 is exploratory in nature, and has to be achieved before proceeding to Secondary Objective #2. Secondary Objective #2 is partly exploratory and partly descriptive in nature, and is intended to provide input into Secondary Objective #3. Secondary Objective #3 is descriptive and conclusive and is directly linked to the Primary Objective of developing a model for academic quality

management in UK HEIs. The extent to which the secondary objectives and by implication the primary objective have been achieved is described below.

Figure 6.1
Hierarchical Relationship Between Doctoral Research Objectives
Source: Osseo-Asare Jr. 2003



Secondary Objective #1

Quantitative and Qualitative Analysis of 42 completed Questionnaires and over 30 Semi-structured Interview Transcripts led to the identification of a large number of internal, external, and competitive critical success factors. These factors were pulled together to create the pools of primary and secondary critical success factors in Appendix C3a and C3b respectively. At this stage the list of critical success factors were broadly categorised into 'internal', 'external', and 'competitive' critical success factors (see Figure 6.2 below). Each of the three broad categories was subsequently sub-divided into five 'enabler factors' and five 'results factors'. Enabler critical success factors comprised of:

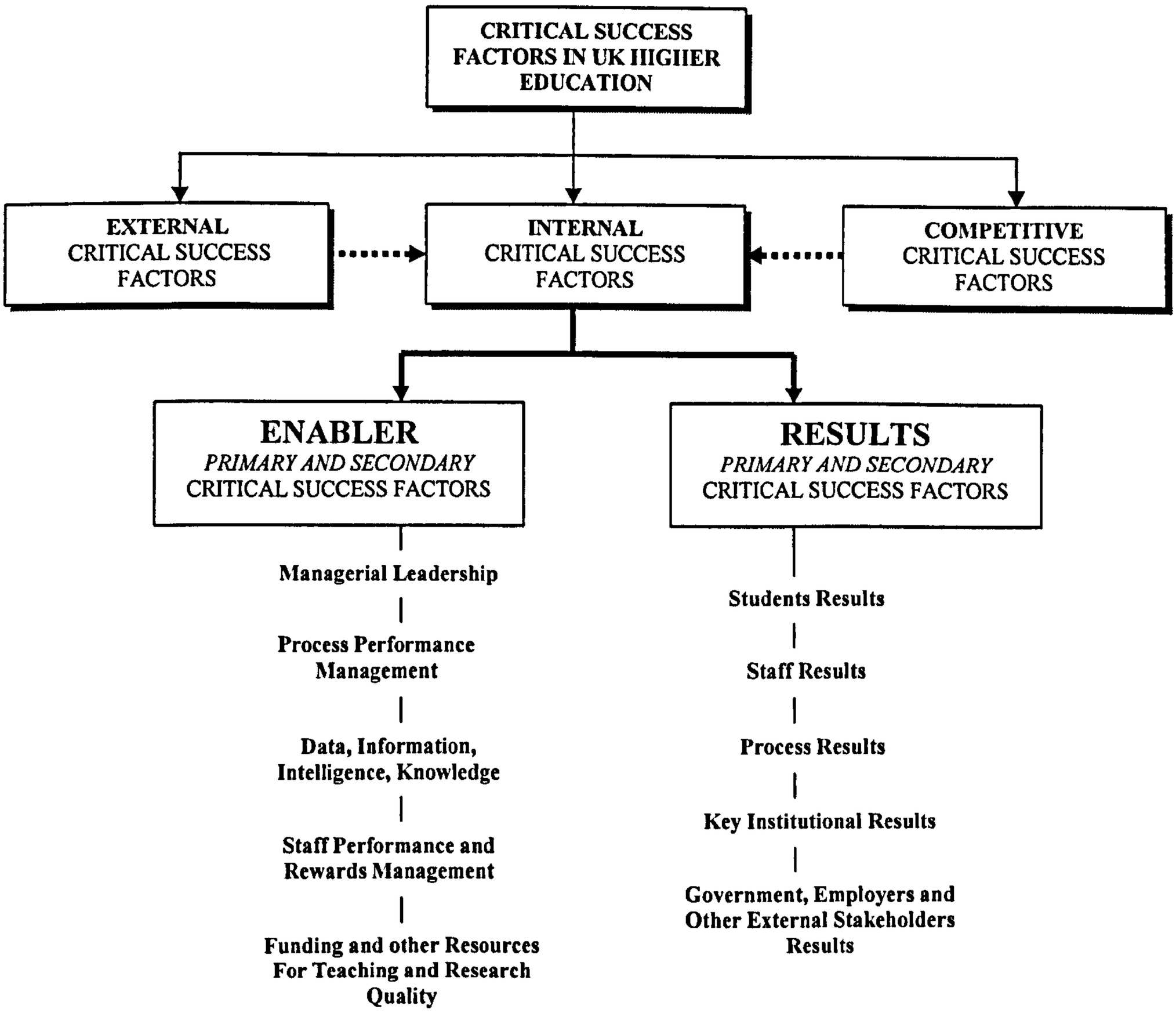
(1) Managerial Leadership; (2) Data, Information, Intelligence, and Knowledge; (3) Funding and other Resources for Teaching and Research Quality; (4) Staff Performance and Rewards Management; and (5) Framework of Core Processes.

The Results critical success factors comprise of:

(1) Students Results; (2) Government, Employers, and other External Stakeholders Results; (3) Key Institutional Results; (4) Staff Results; and (5) Process Results.

This represents a hierarchical categorisation of critical success factors as presented in Figure 6.2 below.

Figure 6.2
A Hierarchy of Critical Success Factors in UK Higher Education
Source: Osseo-Asare Jr. 2003



Secondary Objective #2

Quantitative and Qualitative Analysis of the Evaluation Scores for the 28 Quality Management Practices in Questionnaire Part Two, involved the use of simple summation of the scaled response scores, and modal frequencies expressed in percentages. The empirical data were then subjected to simple hypothesis testing to justify the material. The null hypothesis (Ho: $\rho = 0$) was that no linear relationship exists between the degree of importance and the degree of effectiveness of the quality management practices evaluated. The alternative hypothesis (H_1: $\rho \neq 0$) was that a negative or positive linear relationship exists between the two variables. A two tail t

distribution was used with alpha value $\alpha = 0.05$ corresponding to 95% level of significance and a t-critical value of 2.0211. Using Osseo-Asare's Scoring Mechanism developed in this study, the percentage Relative Importance Scores (RISs) and Relative Effectiveness Scores (RESs) were converted into 'Best Practice Gaps' (BPGs) for 'importance' and for 'effectiveness'. The notion of Best Practice Gaps was used in the categorisation of Quality Management Practices into 'Weak', 'Good' and 'Excellent' under each Critical Success Factor. Simply put a 'positive' BPG represents either a 'Best' or 'Excellent' Practice, and 'negative' BPG represents a 'Good' or 'Weak' Practice. The actual BPG Value used together with a Standard BPG Curve, helped to distinguish between 'best' and 'excellent' practice, and between 'good' and 'weak' practices.

Secondary Objective #3

To explain the root causes of 'Best Practice Gaps' (BPGs), and in order to generate alternative strategies for closing these gaps; Documents providing evidence of 'weak', 'good' and 'best' and 'excellent' quality management practices - in the participating higher education institutions - were inductively and deductively analysed to establish any association between Critical Success Factors and Quality Management Practices. The established associations, which were mostly probabilistic causality, led to re-categorisation of the 'POOL' of critical success factors into PRIMARY or MAIN and SECONDARY or SUBSIDIARY critical success factors presented under Appendices C3a and C3b respectively (see Figure 6.2 above). The works of Kanji and Tambi (1999, 2002) suggest that, most of these associations are deterministic rather than probabilistic causalities. The fact that not everyone agrees places emphasis on the need to regularly monitor critical success factors in order to make informed judgement on the exact nature of the linkage before teaching and research quality improvement policy and strategy decisions.

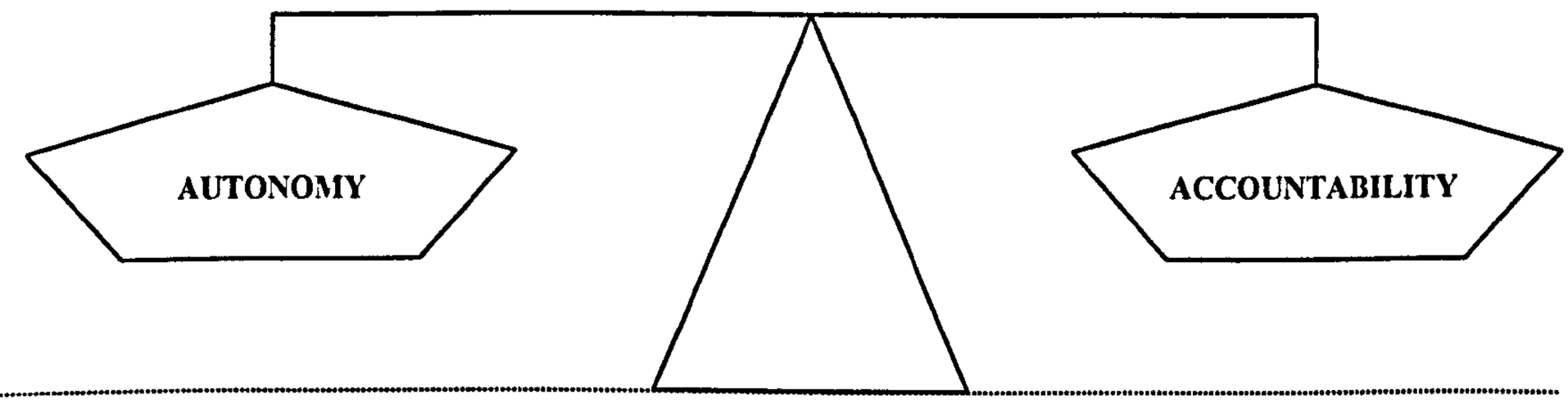
The Inductive Theory for Quality Management in UK higher education institutions was created by a forensic or inductive examination of the nature of the probabilistic associations. The examination led to the synthesis of academic quality management concepts and principles from which fundamental philosophical and empirical assumptions were derived. The concepts and principles, and the assumptions represent a holistic and integrated approach to academic quality management in terms of

comprising of elements from a wide range of alternative theories of educational management and leadership. This is based on the belief that there is no single all-encompassing theory for academic quality management, each model offers a viable alternative to the problem of quality and must be used after careful evaluation of the benefits and limitations. It is however, clear that theories and models, which reflect the context of higher education are more likely to be accepted than those, which reflect the context of industry and commerce – context is therefore critical.

The Primary Objective: Autonomy versus Accountability – *The Balanced Score*

The model developed in this doctoral research thesis represents 'autonomy' and 'accountability' criteria as the two ends of a weighing scale; with 'autonomy' on the left-hand-side and 'accountability on the right-hand-side (see Figure 6.3 below). Excellent Higher Education Institutions are therefore institutions with the ability to meet internal and external demands for quality improvement, by achieving a sustainable balance between internal and external forces for *autonomy* and *accountability* to stakeholders.

Figure 6.3
Autonomy and Accountability Balancing Scale
Source: Osseo-Asare Jr. 2003



This is consistent with the premise underpinning the inductively derived Theory for Academic Quality Management that:

The preservation of intellectual freedoms and institutional autonomy is prerequisite for ensuring that higher education institutions are accountable to both internal and external stakeholders.

The model developed from the theory, suggest that, in an increasingly competitive higher education environment, the major challenge for knowledge production and transmission is essentially about how to sustain the desired level of teaching and research quality improvement on a continuous basis. This raises fundamental questions about the ability of the chancellery, deanery, heads of department and other

staff involved in quality improvement activities to efficiently and effectively deliver a level of individual and team performance which delivers world-class results for students, the government, potential employers, and the institution itself. Contrary to what those who seek to maintain control over the operations of higher education, in particular policy makers in government; this doctoral thesis concludes that, the preservation of 'intellectual freedoms' and 'institutional autonomy' is the single most important driver for creating and transmitting knowledge. It acknowledges that sustainability of 'autonomy' is dependent on 'five' primary critical factors and several secondary critical success factors, which need to be regularly monitored and valuated in terms of their relative efficiency and effectiveness in delivering expected internal and external stakeholders results. A useful comparison between the five primary critical success factors – what this researcher referred to as the five autonomy criteria – and the five EFQM Enabler criteria are compared in Table 6.1 below. It is obvious from Table 6.1 that the five autonomy criteria are more explicitly defined and reflects the context of higher education than the five EFQM Enabler Criteria.

Table 6.1
Autonomy and Accountability Criteria Versus EFQM Enabler and Results Criteria
Source: Based on Figure 10.2 and EFQM (2003)

	AUTONOMY AND ACCOUNTABILITY CRITERIA	FIVE ENABLER CRITERIA
	FIVE AUTONOMY CRITERIA	
1	Managerial Leadership for Academic Quality	Leadership
2	Data, Information, Intelligence, Knowledge Management for Academic Quality	-
3	Funding and other Resources for Teaching and Research Quality	Partnership and Resources
4	Academic, Administrative, Support-service Staff Performance, Results, and Rewards Management	People Management
5	Framework of Core Academic, Administrative, Support-service Processes for Academic Quality	Processes
		Policy and Strategy
	THREE ACCOUNTABILITY CRITERIA	
6	Students Performance Results Management	Customer Results
7	Government, Employers, and other External Stakeholders Results Management	-
8	Key Institutional Performance Results Management	Key Performance Results
		People Results
		Society Results

The inclusion of 'Data, Information, Intelligence, and Knowledge' is in recognition of information as a strategic resource for sustaining competitive advantage, and the fact that, it is the responsibility of managers and leaders of quality to formulate teaching and research quality improvement policy and strategy, and set objectives and targets based on 'facts' – accurate and reliable data, relevant information, intelligence and knowledge. This is consistent with Kanji and Tambi (1999, 2002) notion of 'management by facts'; only that in this case 'facts' represents a mix of 'quantitative

and qualitative data'. Table 6.1 above also shows the 'three' primary critical success factors representing 'performance results'. It is worth noting that 'staff results' and 'process results' are respectively part of 'staff management' and 'process management'.

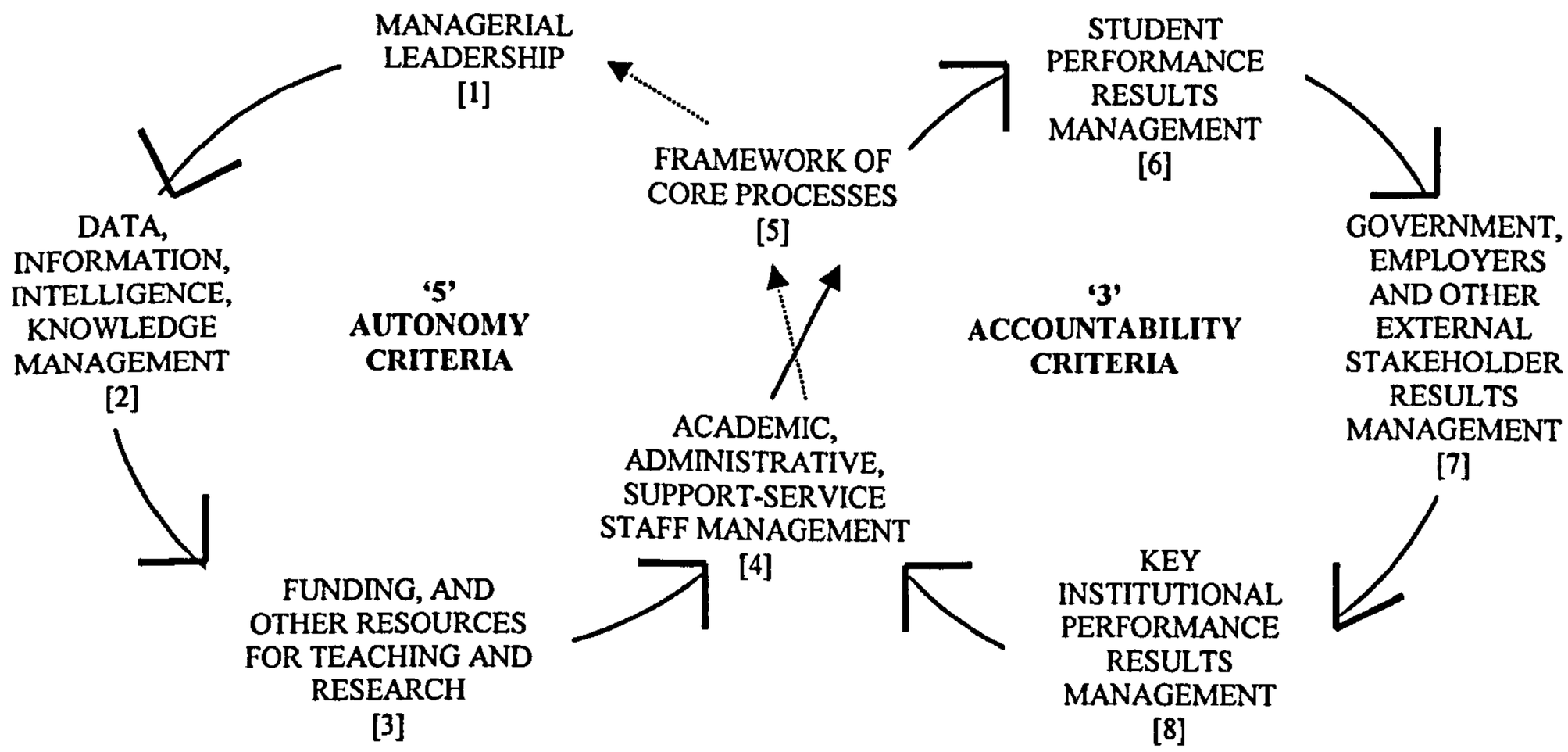
This doctoral thesis offered a multi-dimensional definition and framework for each 'autonomy' and 'accountability' criteria, based on the philosophical and empirical assumptions underpinning principles and concepts derived from the 152 operational level tasks and activities listed in Appendix C5. These definitions have led to the premise that:

Managerial Leadership based on accurate and reliable Data, and relevant Information, Intelligence, and Knowledge; efficiently allocates Funding and other Teaching and Research Resources, to empowered and motivated Academic, Administrative, and Support-service Staff, in order to sustain a framework of Core Processes proven to deliver superior Students, Government, Employers and Institutional Results for Academic Excellence.

This premise is depicted in Figure 6.4 below and is more specific than the more general or generic premise adopted by the EFQM Excellence Model, which states that:

Leadership drives Policy and Strategy, People Management, Partnership and Resources, through core Processes, to deliver improvement in Customer results, People results, and Society results, and ultimately to achieve Excellence in Key Performance result.

Figure 6.4
The Premise for Academic Excellence
Source: Osseo-Asare Jr. 2003



6.1.2. A Critical Realists or Coherentist Perspectives on Validity, Reliability, and Generalizability of the Doctoral Research Findings

The evaluation of quality management practices in terms of their relative 'importance' is a measure of managerial efficiency, which reflects on *theory* or philosophy rather than *practice* or empiricism. The second evaluation criteria used was 'effectiveness' which measures leadership ability to ensure that the right quality improvement decisions are made. It reflects the fact that academic quality management is essentially a practical or real activity rather than theoretical or rhetorical. For instance, Leadership Practice #1 which involved, determination of Mission, Vision, Values and Principles; setting of teaching and research quality improvement objectives and targets; efficient allocation of scarce resources; and the evaluation of effectiveness all involve action – this is consistent with the mindset of critical realists, pragmatists or empiricists.

The fact that majority of respondents deemed the 28 Quality Management Practices as *highly important* reflects their individual understanding of the nature of reality and of knowledge. The differences in their evaluation of the relative 'effectiveness' of a practice, demonstrates variability in their ontological and epistemological assumptions. In some ways the responses cast serious doubt on their sincerity or objectivity; and appears to reveal that some practitioners are dismissive of theories and concepts for their allege remoteness from the real situation in higher education institution. This provides an empirical justification for developing an inductive theory from empirical data reflecting 'what is' yet is underpinned by 'what ought to be'. This mix of practice and theory confirms the cyclical link between empiricism and philosophy, which underpins the mindset of mixed methodologists such as Tashakkori and Teddlie (1998). The works of Professors Colin Evers and Gabriele Lakomski on the theory of educational management, suggest research into academic quality may be grounded in the theory of coherentism, which is in effect a mixed methodology in the post-positivist school of thought (Evers and Lakomski, 1991; 2001:499; Maxcy, 2001:573). Coherentism is consistent with the philosophical stance of critical realism and pragmatism adopted by this researcher. It is in recognition of the fact that theory serves to provide a rationale for decision-making; that practical experience on the job is enhances by an explicit awareness of the theoretical framework underpinning quality management practice in higher education institutions. The adoption of a mixed

methods approach in this doctoral research does not suggest that a positivist approach cannot be used, on the contrary a positivists approach re-enforces the relevance of theory to practice and puts the positivist approach adopted by Professors Gopal Kanji and Dr Tambi in their study of TQM implementation in higher education institutions in the UK, USA and Malaysia (Kanji and Tambi, 2002). The work of Kanji and Tambi is significant because it reflects the context of higher education albeit from a positivist deductive perspective. This doctoral study does the same from mixed methodologist or critical realist perspective. The major problem with the so called Excellence Models being forced on UK higher education institutions - in particular the EFQM Excellence Model - is that they are essentially based on expert opinion reflecting on theory; they do not describe in sufficient detail what teachers and researchers should do to bring about sustained improvement; they do not explain the linkage between strategic and operational issues very well; and their 'modus operanda' do not sufficiently reflect the context of UK higher education. The Theory and Model developed in this doctoral research thesis seeks to address these issues.

The literature clearly acknowledges the fact that positivists, critical realists or coherentists, and social constructivists or phenomenologists have different perspective on validity, reliability, and generalizability of research findings (Easterby-Smith et al., 2002:53). Critical realism as adopted in this doctoral research represents a mixed methodology, which is expected to have elements of the different perspectives on validity, reliability and generalizability. The key elements of the mixed perspectives, which were applied to the doctoral research findings, are outlined as follows:

Construct Validity, Internal and External Validity:

- *This researcher considers the research questions as accurate measures of the reality represented by the teaching and research quality management practices in the setting provided by participating UK higher education institutions;*

- *The ontological underpinnings of the responses to the research questions, suggest that the responses received were partly objective and external as contained in documentary evidence pf practice; and partly subjective, internalised and socially constructed and given meaning by individual academics and practitioners as expressed in their views and opinions on academic quality;*

- *The extensive reference to the documentary evidence of practice in this doctoral research study, was an attempt to reduce respondents' and interviewees' bias, partly because of the complexity of the Questionnaire and partly because the area under study is generally not well understood by both academics and practitioners;*

- *Even though the survey sample may be considered as statistically small; all the higher education institutions from Scott's (2001) Seven Higher Education Categories are proportionally represented in the study.*

Ensuring Equivalence Reliability through Association Between Critical Success Factors and Best Practices:

- *The complexity in the Questionnaire stems from the fact that ensuring equivalence reliability requires the use of multiple questions intended to measure 'means' and 'ends' as represented respectively by 'autonomy' and 'accountability' criteria in the Model developed in this thesis. It is based on the concept of 'triangulation'.*

- *Although, there is a high probability that a different researcher using the same Questionnaire and Interview Plan will generate very similar or closely related primary critical success factors – categorised under autonomy and accountability criteria – it is less probable that a pool comprising of the same set of secondary critical success factors and quality management practices will be created. This is in recognition of the fact that the mix of factors, their ranking, and the nature of the associations between factors, may change overtime – changes, which need to be regularly monitored.*

Generalizability of the Academic Quality Management Theory and Model:

- *The Theory and Model developed in this doctoral research study reflects the historical development of quality in the seven categories of UK higher education institutions, which participated in the study. This make the Theory and Model particularly relevant to these institutions;*

- *The fact that, the survey sample can be re-categorised into pre-1992 and post-1992 higher education institutions, or respectively as 'old' universities and 'modern' universities, widens the domain for general application of the Theory and Model to a significance extent. This however needs verification, because of the philosophical problem of 'induction'. This problem recognises that, however much empirical data one obtains in support of a theory, it is not possible to know exactly what actually goes on in a higher education institution;*

- *The focus on Strategic Quality Management and the applicability of Excellence Models derived from Total Quality Management (TQM) principles and concepts, suggest that the Theory and Model are particularly relevant to the steadily growing number of UK higher education institutions and Schools adopting the EFQM Excellence Model framework.*

6.1.3. The Significance of the Contribution to Knowledge

Research into the ability of UK HEIs to sustain academic quality improvement is bound to raise a wide range of very important and controversial issues relating to the strategic role of 'quality' in the future development of a system of higher education heavily dependent on public funding. The philosophical and empirical underpinnings

of these issues relate to the effectiveness of alternative approaches for improving and managing teaching and research quality. This thesis confirms that UK HEIs face two major challenges in an increasingly uncertain higher education environment; first, *how* to achieve the desired levels of teaching and research quality improvement; and second, *how* to sustain such levels of quality on a continuous basis. This research study makes a number of significant contributions to knowledge. Some of the contributions relate to the general area of strategic management; and others relate specifically to strategic or total quality management concepts and principles. Both areas address the context of higher education in the United Kingdom, and reflect on how critical success factors in the internal, external and competitive environment impact on educational management and leadership. Six areas of the contribution to knowledge are outlined below, followed by brief explanation of their significance:

Contribution #1

The notion of Best Practice Gaps (BPGs) - first introduced in this doctoral research study - further extends the concept of strategic gaps as defined in strategic management textbooks by authors such as Johnsons and Scholes (2002) and Thompson (2003). Best Practice Gaps (BPGs) offer a practical way for measuring 'perception gaps' relating to managerial efficiency and leadership effectiveness. In this doctoral research study, they are derived from Likert-scaled Response Scores for relative 'importance' and relative 'effectiveness', and expressed in percentages. It requires the definition of a Best Practice Score, which according to the Osseo-Asare Scoring Mechanism lies in the range [70 – 79]%.

Empirical evidence provided by this doctoral research study, suggest that, a 'gap' in teaching and research *funds* represents a 'gap' in teaching and research *quality*. Most interviewees confirm that the 'funds-quality' linkage is a deterministic causality, whereby available operational resources are insufficient to achieve and sustain continuous improvement in the quality of teaching and research. Funding 'gaps' therefore, translate into teaching and research 'quality gaps' which are measured in terms of respondents' differing 'perceptions' about the relative importance and effectiveness of a quality management practice. The notion of 'Best Practice Gaps (BPGs)' emanates from the use of Osseo-Asare's Scoring Mechanism, which clearly distinguishes between 'weak', 'good', 'best' and 'excellent' quality management practices. It is an innovative attempt at making the views and opinions of managers, leaders and staff count in quality improvement decisions, and ensures that, raw statistics are not over emphasised in formulating quality improvement policy and

strategy. It is a notion, which will enhance the use of Self-assessment Methodologies based on Expert Review Panels for evaluating teaching and research quality.

Contribution #2

The Osseo-Asare Scoring Mechanism is a four-level scoring device or tool, with well defined range of evaluation scores linked to theoretically and empirically sound definitions of 'weak', 'good', 'best' and 'excellent' practices. Its major advantage over the EFQM Scoring Mechanism is that it is less subjective, less overlapping, and the boundaries of excellence are well defined. Although less objective than Kanji's Scoring Mechanism, it is more flexible in its categorisation of practices, and reflects the context of UK higher education better than the later.

Contribution #3

The Theory of Academic Quality Management created in this doctoral research thesis is a further refinement of the practical applicability of the General Theory of Coherentism as applied to educational management by Professor Colin Ever and Professor Gabriele Lakomski (Evers and Lakomski, 2001:499-520). It offers a mixed ontological and epistemological perspective to quality management in a higher educational setting, as a viable alternative to the extreme philosophical underpinnings of positivism and social constructivism. By so doing, this thesis highlights the merits of adopting mixed methodologies as put forward by mixed methodologists such as Tashakkori and Teddlie (1998).

Contribution #4

The process of theory building led to the development of a composite definition of Academic Quality, and a multi-dimensional definition of Managerial Leadership for Academic Quality. Useful frameworks and models for effective management of quality in specific areas were also developed as by-products from this research study.

This thesis provides evidence to suggest that, the strategic role of quality is less appreciated by most academics and practitioners. This is because of the nature of the controversy and conflict surrounding the 'philosophical or rhetorical' and 'empirical or real' meaning of 'quality' in public-sector higher education. The empirical evidence from this thesis appear to suggest that, as a general terminology, '*academic quality*' may be defined as:

The tangible and intangible attributes or features of teaching, learning, research and scholarly activities, which first and foremost empowers staff and other internal stakeholders to efficiently and effectively improve on their individual abilities to improve on processes which deliver sustainable improvements on students, the government, potential employers and other external stakeholders, satisfaction and delight - because they fit their perceptions of attributes or features that meet their needs and delight them.

According to Brennan and Shah (2000:18), most national quality bodies in Europe including the UK have failed in their attempt to come up with a 'composite'

conception of academic quality that would achieve legitimacy with all stakeholder groups. This failure has led to a situation where the most powerful stakeholder group decides on which definition to apply in order to achieve their stated aims and objectives. The above definition provides a composite meaning of academic quality, in terms of recognising the needs and expectations of both internal and external stakeholders. This composite meaning is reflected in different ways - in the model developed in this thesis - as follows:

- *The notion of quality as 'perfection' or 'conformance' is captured by the 'accountability' criteria under GOVERNMENT and other external stakeholders' Results Management. The government, as the main funder of higher education, wants to ensure that higher education institutions become more accountable to students as customers and to funding bodies. It is however, a notion of quality that is essentially static, retrospective, and does not adequately reflect future changes in the environment.*

- *Quality as 'fitness for purpose', is captured by the 'accountability' criteria specifically under STUDENTS Results Management. It requires that teaching, learning, research and scholarly activities needs to be operated in a manner that meets the needs and expectations of STAFF as internal customers and STUDENTS as external customers. It is a customer-oriented approach to quality, which helps to determine what the specification for a product or service should be, making it important for individual stakeholders to clearly articulate their needs and expectations.*

- *Quality as 'value-for-money', is captured by both the 'autonomy' and 'accountability' criteria. It is a more important definition for both internal and external stakeholders including the GOVERNMENT, who will actively seek the same outcome with a lower cost provider of higher education. It also brings into sharp focus the issue of Quality Values in an academic environment.*

- *The definition of quality as 'transformation' is captured by both 'autonomy' and 'accountability' criteria. It reflects the long-term mission of higher education and places emphasis on the needs of STUDENTS, GOVERNMENT, EMPLOYERS, and the SOCIETY as a whole. It recognises the power of knowledge to transform students from 'surface-learner' to 'deep-learner' by motivation and empowerment – what some interviewees called cognitive transcendence.*

The proposed definition and therefore the model, is a convergence of ideas, concepts, principles, meanings and approaches, which reflect the needs and expectation of internal and external stakeholders in order to sustain academic quality improvement. The whole idea is that, a 'holistic integrated academic quality model' requires a 'holistic integrated definition of academic quality'.

Contribution #5

The fact that the Model places emphasis on 'autonomy' and 'accountability' means it seeks to meet the needs and expectations of both internal and external Stakeholders, notably: academic and non-academic Staff, Students, the Government, potential Employers, and Society and as a whole. It therefore provides a basis for developing a more holistic and integrated Self-assessment Methodology to the QAA and HEFCE Models for Teaching and Research Quality Assessment in UK HEIs.

Successive Conservative and Labour administrations since the late 1970s have moved from a commitment to preserving institutional autonomy to modernization through cost-effectiveness and accountability (Kerr, 1987:127-132; DfES, 2003). This doctoral research thesis concludes that this change in policy commitment is forcing many UK HEIs to evaluate the benefits of adopting strategic quality management principles as part of a deliberate strategy to meet the requirements for *'intellectual freedoms and institutional autonomy'* and *'accountability to both internal and external stakeholders'*. The model developed in this thesis addresses the concerns of HEIs about how to 'efficiently' and 'effectively' balance these two 'opposing' internal and external demands simultaneously through integration.

Contribution #6

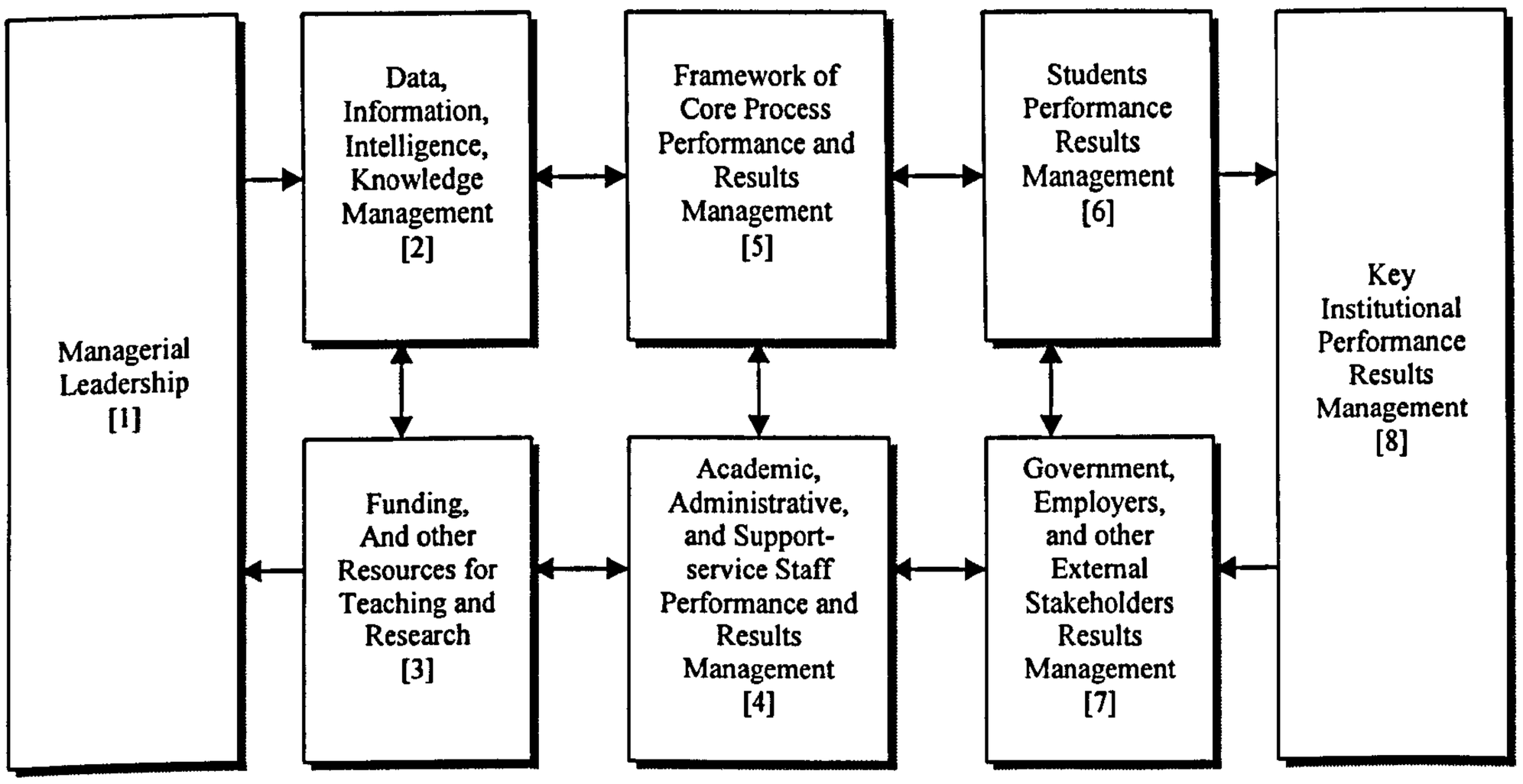
The terminology used in the Model reflects the context of higher education, and relates directly to teaching, learning, research and scholarship, better than the current EFQM terminology. Used together with Osseo-Asare scoring mechanism the Higher Educational Version of the EFQM Self-Assessment Methodology could be developed as a viable alternative to the Educational Version of the MBNQA Model in the USA. It may also inspire modification of Lloyds-TSB version of the EFQM Excellence Model being piloted in some UK Schools (Lloyds-TSB, 2001).

This research study provided empirical evidence which support earlier studies by Kanji and Tambi (1999), in confirming that implementation of highly successful Excellence Models based on TQM - runs into serious difficulties. This is partly because, most academics responsible for quality do not actually understand the terminology or phraseology used, and at best pay lip-service to Excellence Model implementation. The alternative model developed in this thesis is an attempt to use the terminology of higher education to redefine the fundamental concepts and principles underpinning the philosophy of strategic quality management from which TQM-driven Excellence Models emanate. Finally, the fact that most of the 28 Quality Management Practices evaluated in this study were categorised as 'weak' practices, confirms that even though there has been a shift from inspection-based to prevention-based activities, this is not evident in the participating HEIs. Quality management practices in these institutions still place emphasis on 'inspection-based' tasks and activities. The strategic implication is that the work of quality managers and their staff simply involves 'inspecting' 'outputs' from processes, to see if they conform to expectations. The model developed in this thesis is a serious attempt to help HEIs sustain a culture for academic excellence by adopting preventative measures.

6.1.4. The Model as a Further Development of the EFQM Excellence Model

The model developed in this thesis may correctly be regarded as a further development of the more generic EFQM Excellence Model. It suggests that the EFQM framework needs to be modified using the terminology and the detail description of quality management practices provided in this thesis – even if the current structure is to be maintained for easy recognition. This will facilitate its implementation in UK HEIs. Figure 6.5 below shows the interrelationships between the different criteria in a feedback and feed-forward manner depicting organisational learning and innovation. The most significant similarity between the model develop in this thesis and the EFQM Model is demonstrated by the fact that the 'autonomy' and 'accountability' criteria represent 'efficiency' and 'effectiveness' respectively, which in turn are respectively synonymous to 'enabler' and 'results' criteria.

Figure 6.5
The Premise for Academic Excellence
Source: Osseo-Asare Jr. 2003



It is therefore possible to derive a set of sub-criteria for 'efficiency' and 'effectiveness', which is more 'holistic' and 'sustainable' and incorporates all the attributes of the EFQM Enabler and Results criteria shown in Table 6.2 below. The sub-criteria are as follows:

Sub-criteria For 'Efficiency':

- *The extent to which a quality management practice or approach helps in the efficient allocation of Funding and other Resources for Teaching and Research Quality Improvement, in order to meet and exceed the needs and expectations of internal and external Customers and other Stakeholders;*

- *The extent to which a quality management practice or approach helps to sustain intellectual freedoms and institutional autonomy, respectively through empowerment and short-term and long-term financial stability.*

Sub-criteria For 'Effectiveness':

- *The extent to which a quality management practice or approach helps to meet and exceed the needs and expectations of internal and external Customers and other Stakeholders;*

- *The extent to which a quality management practice or approach helps to achieve accountability objectives and targets.*

Table 6.2
Evaluation Attributes and Scoring Mechanisms and Evaluation Attributes
Source: British Quality Foundation (2001), Osseo-Asare (2003)

Osseo-Asare's Scoring Mechanism	Best Practice Evaluation Attributes	EFQM Scoring Mechanism
AUTONOMY	**EFFICIENCY**	**ENABLERS**
+	Stakeholders' Needs and Expectations	+
+	Degree of Integration	+
+	Extent of Implementation	+
+	Systems Thinking	+
+	Measurement	+
+	Learning and Innovation	+
+	Continuous Improvement	+
+	Holism	NOT INCLUDED
+	Sustainability	NOT INCLUDED
ACCOUNTABILITY	**EFFECTIVENESS**	**RESULTS**
+	Positive Trends	+
+	Objectives and Targets Achieved	+
+	Best-In-Class Performance	+
+	Causal Relationships	+
+	Relevant Performance Areas	+
+	Holism	NOT INCLUDED
+	Sustainability	NOT INCLUDED

By using Osseo-Asare's Scoring Mechanism, a quality management practice or approach can be categorised into 'weak', 'good', 'best' and 'excellent' practice, if its percentage average evaluation score for both 'efficiency' and 'effectiveness' lies in the relevant scoring range: (0-45) for WEAK; (46-69) for GOOD; (70-79) for BEST; and (80-100) for EXCELLENT practice. The corresponding Best Practice Gap (BPG) Value for each practice represents a gap in either 'efficiency' or 'effectiveness' or both. A 'positive' BPG, suggests the 'enabler' or 'results' practice is in either the 'best' or 'excellent' practice category; with several areas of strengths and few areas for further improvement. A 'negative' BPG suggests the 'enabler' or 'results' practice is either in the 'good' or 'weak' practice category, with few areas of strength and several areas for improvement. When used in this way the 'efficiency-effectiveness' evaluation criteria and Osseo-Asare's Scoring Mechanism can replace the EFQM Scoring Matrix, which is rather too subjective and inconsistent in deciding the boundaries of 'weak', 'good', 'best', and 'excellent' practices. This researcher

believes that, the adoption of the notion of 'Best Practice Gaps', would speed up the process of evaluating practices; the process of identifying areas of strengths and areas for improvement; and reduce the cost of bureaucracy by shortening the decision-making processes and reducing the volume of paperwork

Summary of the Critical Work undertaken and the Contribution to Knowledge

Section [6.1] first summarised the conclusions drawn from the first five chapters of the thesis, which provided the justification for carrying out research into quality in higher education based on a clearly defined research gap, research problems, research questions and objectives. This led to the adoption of a critical realist stance and choice of questionnaires and interviews for both exploratory and conclusive phases of the field research survey. Second, it reflected on the extent to which the primary and secondary research objectives have been achieved. The identification of CSFs in higher education, followed by identification of best practices linked to each CSF, and finally by explanation of the association between CSFs and best practices; confirmed that, the three secondary research objectives have been achieved. This provided the basis for creating a theory grounded in the empirical data collected, which subsequently led to the development of the academic quality model. Third, it commented on the *critical realist* stance adopted by exploring similarities between *critical realism* and *coherenticism*. The conclusion is that both philosophical positions encourage a mix methods approach to research, which is intended to enrich the data collected and ultimately increase the *reliability* and *validity,* and reduce *bias* in the findings. Finally, six areas of the thesis' contribution to knowledge were identified as:

- *Introduction of the notion of Best Practice Gap (BPG), as a tool for measuring perception gaps, and generating alternative strategies for improving quality management practices;*
- *Introduction of Osseo-Asare Scoring Mechanism for categorising quality management practices into 'weak', 'good', 'best', and 'excellent'.*
- *Creation of a coherent Theory for sustaining academic quality improvement;*
- *Development of a composite definition of academic quality;*
- *Development of the autonomy-accountability model for sustaining academic quality improvement and management;*
- *Modification of the EFQM terminology to make it more contextual and therefore appropriate for higher education.*

6.2

Practical Recommendations for Sustaining Academic Quality Improvement and Areas for Further Research

"...Financial issues...bare on the whole structure of higher education; its purposes; and how it can best make its contribution to our economic wellbeing in a decade in which the basis of our prosperity will increasingly be challenged "(Dearing, 2003:12)

This is the final section in the last chapter of the thesis, which provides a set of recommendations and highlights areas for further research at the post-doctoral level. The recommendations are derived mainly from the 'weak' quality management practices in the pools of critical success factors and associated academic quality management tasks and activities in Appendix C3, C4 and C5. The recommendations are based on the recognition that a Best Practice Gap (BPG) comprises of two component gaps: a managerial efficiency gap and leadership effectiveness gap. To show the strategic relevance of these recommendations, they are linked to each area of the Model developed in this thesis. This means we have a set of recommendations to help preserve institutional autonomy and intellectual freedoms, and another set of recommendations for ensuring accountability to internal and external Stakeholders.

6.2.1. Sets of Practical Recommendations for Sustaining Academic Quality

This sub-section presents eight sets of practical recommendations for preserving institutional autonomy and ensuring accountability to both internal and external stakeholders in UK higher education. The first 'five' sets of recommendations relate to the 'five' autonomy criteria in the model, and the second 'three' sets of recommendations relate to the 'three' accountability criteria. For each criterion, specific recommendations are made, which require management and leadership action at strategic, tactical, and operational levels within individual institutions.

A. Recommendations for Preserving Institutional Autonomy

The 'five' sets of recommendations for preserving institutional autonomy and individual intellectual freedoms are presented as follows:

Recommendation: #1:
Managerial Leadership For Academic Quality:

- *A composite definition of Academic Quality should be agreed on by the Chancellery, Deanery and Heads of Department, and used as the means for achieving and sustaining Academic Excellence – defined to include Teaching, Learning, Scholarship and Research Quality.*
- *Vision Statements should explicitly reflect on Local, Regional, National and International Standards for Academic Excellence, and should underpin Statements of Institutional Mission.*
- *Mission and Vision Statements should be translated into statements of values and principles, which reflect the need to preserve Academic Freedoms and Institutional Autonomy, whilst ensuring accountability to Internal and External Stakeholders.*
- *Standards of Academic Excellence should reflect on issues of Diversity, Equality, and the creation of a Learning Institution, a Knowledge Society, and Knowledge-based Economy.*
- *Ensuring that decisions to discontinue a Programme or a Teaching and Research Quality improvement initiative - because of continuous lose of teaching and research revenue - are timely and do not worsen liquidity problems.*

Recommendation: #2:
Data, Information, Intelligence, Knowledge:

- *Promoting Management By Facts (MBF) - rather than Management By Misinformation (MBM) - by ensuring that Data are well sourced, up-to-date, and efficiently processed into relevant information for teaching and research quality improvement decisions*
- *Encouraging the setting up of formal and informal Networks for Internal Transfer of Best Practices and Cross-Institutional Sharing of Data, Information, Intelligence and Knowledge on Weak, Good, Best, and Excellent Practices.*
- *Establishing dedicated Marketing Departments and implementing Marketing Intelligence Systems for capturing and processing feedback from Students, the QAA, the HEFCE, Accreditation Bodies, Professional Bodies, potential Employers and other external Stakeholders.*
- *Ensuring that approach to Managing Knowledge is both Retrospective and Prospective and ensures that feedback from Internal and External Stakeholders are incorporated into Teaching and Research Quality Improvement Policy and Strategy on time.*

Recommendation: #3:
Funding and other Resources for Teaching and Research Quality:

- *Chancellery, Deanery, and Heads of Departments need to ensure there is strong Budgetary Support for Regular Maintenance and Increased Investment in Infrastructure for Teaching and Research, Administrative, and Support-service operations.*
- *Setting up Teaching and Research Quality Improvement Budget Centres (QIBCs) comprising of Cost Units, Revenue Units. Cost Units should make use of Activity-based Costing Methods as part of Cost-Benefit Analysis, backed by realistic 3 – 5 year Cash Flow Forecasts.*

- *Ensuing that Collaboration with Further and other Higher Educational Institutions; Government Departments – including the QAA and HEFCE; and other local, regional, national, and international Public Sector organisations – are mutually beneficial and not simply an exercise in public relations.*

- *Encourage Partnerships with local, regional, national, and international Private Sector Organisations, which actually support Masters, Doctoral and Post-doctoral Programmes and Professorships in applied research and learning.*

- *Using ICT infrastructure to effectively communicate Quality Improvement Objectives and Targets through timely Deployment of Quality Improvement Policy and Strategy.*

- *Chancellery, Deanery, Heads of Department, Quality Managers, should be able to defend the levels of funding required, and be actively involved in efficiently allocating funds to well motivated Staff, empowered to ensure Continuous Processes Improvement. This will help ensure there is a high degree of certainty about Funding levels and therefore Staffing Levels – including levels of other Teaching and Research Resources.*

- *Implementation of deliberate Policies and Strategies for creating Synergies in academic and non-academic areas, to ensure effective interface management and reduction in the cost of bureaucracy. This requires effective integration of academic, administrative, and support-service functions.*

Recommendation: #4:
Staff Performance, Results, and Rewards Management:

- *Top management and leadership to ensure that Staff Development Budgetary Systems are decentralised in support of Professional Development Initiatives.*

- *Implementation of deliberate strategies for reducing Staff Turnover aimed at maintaining appropriate Staff-Student Ratios and increasing Staff Retention Rates.*

- *Effective Management of Stress at work by monitoring Number of Days off Sick and take appropriate action in order to control the negative impact of Absenteeism on Staff and Student Morale.*

- *Ensuring that 'task completion' is explicitly linked to specified 'reward or recognition' for efficient and effective operation of Reward Systems.*

- *Quality Managers and Leadership should ensure active involvement of Teaching and Research Staff in setting Quality improvement Objectives and Targets for their areas of responsibility; and increased participation in the TQA and RAE Processes.*

- *Implementation of an open two-way Communication System, which captures feedback from Staff and responds quickly to Staff Welfare, Leadership Training and Development Needs.*

- *Ensure internal Regulations are easily understood and correctly interpreted by Staff.*

- *Chancellery, Deanery, Heads of Department, and Quality Managers should deal with issues of discrimination openly in a way not to offend individual sensitivity at work.*

- *Providing support for Staff who have just being promoted to give them confident in their new roles*

- *Society as a whole demands Equal Opportunity, top managers and leaders of institutions should continue to pay serious attention to areas which impacts significantly on their institution's national and international reputation as a Centre for Academic Excellence.*

- *Staff involvement should be both top down and bottom up, where they are required to endorse key improvement decisions made at the top; after critical evaluation while maintaining loyalty.*

- *Performance Appraisal System (PAS) to be effectively integrated with Performance Management System (PMS).*

- *Procedure for Performance Appraisal Systems (PAS) varied sufficiently to take account of the needs of Staff with disabilities or difficulties in a work environment.*

- *Staff Promotion and Rewards should be related to Staff Performance and future potential, and less on effectiveness of lobbying.*

- *Strengthening the association between Staff Performance Indicators and Staff Rewards, to give Staff a high degree of certainty regarding their Career Prospects in their departments, and to prevent Management and Leadership by Misinformation.*

- *There is an urgent need to encourage both Team and Individual Efforts; and ensure that Annual Staff Appraisals are effectively linked to Promotions to Senior Lectureships and Professorship and Improvement in Staff Finances.*

- *Setting up Quality Teams led by research-active Staff, and comprising of Teaching and Research Staff who are not research-active, to help them critique texts and articles in their areas of expertise as basis for improving the Quality of Scholarship and Teaching, and increasing Research Outputs.*

Recommendation: #5:

Process Performance and Results Management:

- *Tasks and Activities making up a Process need to be monitored on regular based to ensure timely redesign of Processed in order to sustain Continuous Process Improvement through Value Adding and Cost Effective Operations.*

- *Implementation of effective Processes for synthesizing Teaching and Research Quality Improvement Policy and Strategy from Principles and Values.*

- *Effective Top-down Process of Communicating Explicit Statements of Teaching and Research Quality Improvement Policy, Strategy, Objectives and Targets.*

- *Implementation of Open Bidding Processes for efficient allocation of Funds under explicit conditions.*

- *The extent to which Team dynamics impact on actual Individual performance at work should inform the process of setting Teaching and Research Quality Improvement Objectives and Targets.*

- *Elimination of overlaps in the actual work Teaching and Research Staff are expected to carry out as stated in their Job Descriptions. This calls for a regular online process for updating Job Descriptions and effectively matching Job Specifications with Job Description to reflect individual ability.*

- *Ensuring that Process Improvements and Performance Results are accurately measured as far as practicable, to ensure consistency with assessment of performance gaps.*

- *Ensuring that Resource Allocation for Process Improvement is based on the concept of internal customers and suppliers, and reliance on accurate data and relevant information, intelligence and knowledge about achievable levels of improvement.*

- *Implementing Processes for meeting the requirements for various Performance Excellence Awards. Ensuring that these requirements can be met cost-effectively, and relate to Research, Scholarship, Teaching and Learning.*

B. Recommendations for Ensuring Accountability to Stakeholders

Three sets of recommendations are presented in this section under each of the 'three' accountability criteria in the Model - these recommendations are self-explanatory.

Recommendation: #6:

Students Performance Results Management:

- *Ensuring that Rules and Regulations are clear and varied to meet the Needs and Expectation of the diverse Student population. To do this effectively requires input from Teaching and Research Staff, Administrative and Support-service Staff, and representative of Students' Unions.*

- *Effective Harmonisation of Students Complaint Procedures, ensuring they are less bureaucratic, and not restricted to lower level managers and leaders who are not key decision-makers in their departments, school or institutions.*

- *Combine the use of Questionnaires with Focus Groups of Students and Tutors; and Questionnaire and Interview Questions should attempt to capture the real needs and expectations of Students.*

- *Pastoral Care Systems to deal more effectively with areas students are most interested in, such as: students finances, staff-students relationships, health and safety, socialisation – including anxieties and fears of students in particular the young, disabled, from overseas, with language difficulties.*

- *Effective management of serious academic offences and appeals relating to examinations and assignments results, and research supervision at undergraduate and post-graduate levels.*

- *Students should be notified on regular bases when Results from Students Satisfaction Surveys are incorporated into Teaching and Research Quality Improvement Policy and Strategy.*

- *Quality Managers and Leaders to prioritise the Needs and Expectations of Students, in recognition of the strategic importance of strengthening the link between Student Delight and Student Loyalty for effective Alumni Relationship Management.*

- *Implementation of Strategies for Handling Staff-Student Complaints about Teaching approaches and the quality of Research Supervision.*

- *Equipping Academic and Non-academic Staff with the skills and investing in Teaching and Learning facilities in order to improve the quality of the Learning Experience of Students with disabilities; and to help students move from surface-learning to deep-learning.*

Recommendation: #7:

Government, Potential Employers, and other External Stakeholder Results Management:

- *Increasing Research Output through active participation in Environmental Sustainability Research Projects sponsored by Local, National, and International Environmental Protection Bodies.*

- *Strengthening Partnership arrangements with Government Departments and Agencies such as the Department of Education and Skills, the Department of Trade, the Quality Assurance Agency (QAA) and Higher Education Funding Council for England (HEFCE) to meet the Funding requirements, and requirements for Students and Staff with Disabilities.*

- *Implement deliberate strategies for dealing with the impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduate; Staff Teaching Practices and Staff Morale.*

- *Implement a Policy for Recruiting from the local community, and be actively involved in supporting Community Sports and Leisure activities.*

- *Ensure Staff at all levels of management and leadership – with responsibility for Teaching and Research Quality Improvement - belong to reputable Professional Bodies, which promote Teaching, Learning and Research Quality.*

Recommendation: #8:
Key Institutional Results Management:

- *Justification of Strategic Quality Improvement Plans based on Institutional and Departmental priorities, and realistic and achievable Teaching and Research Quality Improvement objectives and Targets.*

- *Ensuring that where frequent restructuring becomes necessary, they do not lead to dramatic changes in Teaching and Research Quality Improvement Policy, Strategy, Objectives and Targets, at all levels of the management.*

- *Effective Cash Management by working out a mechanism for internal transfer of idle cash from departments with no viable projects to spend on, to others with viable projects but no cash.*

- *Use a comprehensive and balanced mix of Financial and Non-financial Measures.*

- *Implement deliberate policy and strategy for reversing negative trends in meeting Teaching and Research Budgets, and sustaining positive trends on continuous basis.*

- *Adopt Management By Exception (MBE) principles when acting on variances from Teaching and Research Performance Objectives and Targets.*
- *Teaching and Research Quality Improvement Plans should be consistent with Cash Forecasts. This requires effective integration of Short-term Quality Improvement Plans with Long-term Quality Improvement Plan, to prevent misappropriation of resources and missed opportunities.*

- *Active lobbying by Chancellery and Deanery of Government Departments and potential Employers and Funding Bodies in raise money to deal with backlog for Teaching and Research Infrastructure. This should be based on a well thought out Strategic Quality Plan for the Institution and the various Departments.*

In summary, it is worth noting that, the 'model' as it stands is essentially conceptual, which means the above recommendations underpinning the model would need to be tested before they are fully implemented. The testing of the theory created in this thesis, as well as the model and recommendations would be piloting out as part of a post-doctoral research project.

6.2.2. Areas for Further Research

A number of general and specific areas for Further Research at a post-doctoral level are outlined below. The Specific Areas are linked to each criterion in the Model.

General Areas For Further Research

1. *Pilot testing the Model in a number of Departments at the University of Derby in the UK and at Penn State University in the USA, as part of a Comparative Study on the Model's acceptability and applicability.*

2. *Pilot testing the Model in UK HEIs, which are adopting the EFQM Model, in order to assess the Model's compatibility with the EFQM framework.*

3. *Application of Kanji's Methodology to determine the performance indices for each 'autonomy' and 'accountability' criterion, in order to calculate the Academic Excellence Index for each participating Higher Education Institution in this doctoral thesis. This will be based on the assumption that a deterministic causality exists between the two sets of criteria in the Model.*

4. *Making use of a simplified version of the Questionnaire to carry out a Research Survey involving a much larger sample size, and adopting Kanji's deductive methodology, with a view to extending the degree of generalizability of the research results.*

5. *Even though the notion of Best Practice Gaps (BPGs) and the definition of 'weak', 'good', 'best', and 'excellent' practices are empirically derived and conceptually sound, they need to be tested to determine the level of acceptability and applicability amongst academics/practitioners in UK HEIs.*

6. *Even though confidence in the four levels of scores adopted by the Osseo-Asare Scoring Mechanism was increased when the empirical results were mapped against them the scoring mechanism needs to be subjected to fuller validation at the post-doctoral level.*

Specific Areas For Further Research

Specific Research Area #1
Managerial Leadership:

A Critical Evaluation of the relative stability between the multi-dimensions of Managerial Leadership for sustaining Teaching and Research Quality Improvement in Post-1992 Universities.

Specific Research Area #2
Transfer of Best Practices:

The Nature of the Impact of internal transfer and cross-institutional sharing of data, information, intelligence, and knowledge on weak, good, best, and excellent Teaching and Research Quality Management Practices; on the level of competition and on institutional effort to sustain competitive advantage through academic quality improvement.

Specific Research Area #3
Funding and Quality Gaps:

Determining the Sensibility of Teaching and Research Quality Gaps to percentage changes in Funding Gaps of Budget Deficits.

Specific Research Area #4
Interface Management:

Identification and critical evaluation of the Multiplicity of management and leadership Skills required to efficiently and effectively manage the Interface between academic and administrative functions.

Specific Research Area #5
Process Design Management:

Developing a systems-based methodology for re-designing Teaching and Research Processes using established hierarchical relationships between key teaching and research quality improvement tasks and activities known to deliver significant improvements in performance results.

Specific Research Area #6
Students' Delight:

Evaluating the extent to which scarce funding and other resources for Teaching and Research should be used with the objective of achieving performance results, which delight students as customers; rather than achieving baseline or optimal results.

Specific Research Area #7
QAA and HEFCE Requirements:

Contrasting the recently introduced QAA Model for Institutional Review and the proposal for revising the HEFCE Model for Research Quality Assessment with Internal Processes in order to identify areas for synergy.

Specific Research Area #8
Management of Teaching and Research Overheads:

Evaluating the Benefits and Limitations of adopting Activity-Based Costing Systems in order to effectively manage the Overhead Expenditure incurred by Teaching and Research Quality Improvement activities.

This brings to a successful completion what might best be described as an insightful empirical research into quality in an increasingly competitive higher education environment. With adequate funding and availability of other research resources, this researcher hopes to undertake further research in the areas identified above.

References

ACKOFF, R. L. (1981) *Creating the Corporate Future,* Wiley, New York.

ADAIR, J. (1983) *Effective Leadership,* Pan Books.

ALBRECHT, K. AND ZEMKE, R. (1985) *Service America: Doing Business in the New Economy,* Dow Jones-Irwin, Homewood, Illinois.

AMERICAN PRODUCTIVITY AND QUALITY CENTRE (1997) *What is Benchmarking?,* APQC Report, Houston, Texas, USA

AMERICAN PRODUCTIVITY AND QUALITY CENTRE (1998) *Benchmarking Benchmarking,* APQC Report, Houston, Texas, USA.

ANTHONY, N. R., DEARDEN, J., AND VANCIL, R. F. (1976) *Management Control Systems: Text and Cases,* Homewood, Irwin, Illinois.

ARMSTRONG, M. (1987) "Human Resource Management: A Case of the Emperor's New Clothes?" *Personnel Management*: 19, 8, August.

ASTON, J. (1998) Managing Best Practices, Business Intelligence, London.

AUBERT, N. AND DE GAULEJAC (1992) *The Cost of Excellence [Le Cout de l'Excellence],* Ed. Du Seuil, Paris.

BAILEY, D. AND BENNETT, J. V. (1996) "The realistic model of higher education", *Quality Progress,* Vol. 29, pp. 77-79.

BALL, C. J. E. (1985) "What the hell is quality?", in *Fitness for Purpose: Essay in Higher Education,* Society for Research into Higher Education and NFER/Nelson, Guildford, UK

BALL, C. J. E. (1990a) *More Means Different: Widening Access to Higher Education*, Royal Society of Arts, London.

BALL, S. J. (1990b) *Politics and Policy Making in Education.* Routledge, London.

BALL, C. J. E. (1991) *The Learning Society: Interim Report,* Royal Society of Arts Journal, pp. 380-394, May.

BALL, S. J. (1997) "Good School, Bad School: Paradox and Fabrication", *British Journal of Sociology of Education,* Volume 18, Number 8, pp. 317-336.

BALDRIDGE, J. V., CURTIS, D. V., ECKER, G. AND RILEY, G. L. (1978) Policy Making and Effective Leadership, Jossey-Bass, San Francisco, CA.

BALNAVES, M. AND CAPUTI, P. (2001) *Introduction to Quantitative Research Methods: An investigative approach,* SAGE Publications, London.

BARGH, C., SCOTT, P. AND SMITH, D. (1996) *Governing Universities: Changing the Culture? The* Society for Research into Higher Education (SRHE) and Open University Press, Buckingham, UK

BARGH, C., BOCOCK, J., SCOTT, P. AND SMITH, D. (2000) *University Leadership: The Role of the Chief Executive,* Society for Research into Higher Education & Open University Press, Buckingham, UK.

BARNARD, J. (1999) "Using Total Quality Principles in Business Courses: The effect on Student Evaluations", *Business Communication Quarterly,* Vol. 62(2), pp. 61-73

BARNES, J. (1999) "Funding and University Autonomy", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 162-190, Jessica Kingsley Publishers, London, UK.

BARNETT, R. (1992) *Improving Higher Education: Total Quality Care*, Society for Research into Higher Education & Open University Press, Buckingham, UK.

BARNETT, R. (1994) Power, enlightenment and quality evaluation, European Journal of Education, 29 (2), pp. 165-179

BARTOLI, A. AND HERMEL, P. (1989) *Le Development de L'Entrprise, Nouvelles Conseptions et Pratiques,* Ed. Economica, Paris.

BASS, B. M. (1960) *Leadership, Psychology and Organizational Behaviour,* Harper & Row, New York, NY.

BASS, B. M. AND AVOLIO, B. J. (1994) *Improving Organizational Performance Through Transformational Leadership,* SAGE Publications, London, UK

BATTACHARYA, B. (2002) "Collaboration: a new model for off-campus distance education," Paper presented to the International Distance Education and Open Learning Conference, 5 March.

BAUER, M. AND HENKEL, M. (1999) "Academic Responses to Quality Reforms in Higher Education: England and Sweden Compared", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 236-262, Jessica Kingsley Publishers, London.

BECHER, T. (1989) *Academic Tribes and Territories, Intellectual Enquiry and the Cultures of Disciplines,* Society for Research into Higher Education & Open University Press, Buckingham, UK.

BECHER, T. AND KOGAN, M. (1992) *Process and Structure in Higher Education,* Routledge, London, UK

BECKER, S. W. (1993) "TQM does work: ten reasons why misguided attempts fail", *Management Review*, May.

BECKER, H. S. (1998) *Tricks of the trade: How to think about research while you're doing it,* University of Chicago Press, Chicago.

BECKFORD, J. (2002) *Quality,* Second Edition, Routledge, London, UK

BEECHNER, A. B. AND HAMILTON, K. A. (1999) "Infinity Model for Organisational Excellence", *Proceedings of 53rd Annual Quality Congress,* pp. 333-336, USA

BELBIN, R. M. (1993) *Team Roles at Work*, Butterworth-Heinemann

BELOFF, M. (1969) *The Plateglass Universities.* London: Secker and Warburg.

BENNIS, W. AND NANNUS, B. (1985) *Leaders: The Strategies for Taking Charge*, Harper & Row, New York, NY.

BERRY, L. L., ZEITHAML, V. A. AND PARASURAMAN, A. (1985) "Quality counts in services too", *Business Horizon,* 28(3), pp. 44-52.

BIGGS, J. B. (1987) *Student Approaches to Learning and Studying,* Australian Council for Educational Research, Hawthorn, Victoria

BIGGS, J. B. (1993) "What do inventories of students' learning processes really measure? - A theoretical review and clarification", *British Journal of Educational Psychology,* 63, pp. 1-17.

BIGGS, J. B. (1996a) "Assessing learning quality: reconciling institutional, staff, and educational demands", *Assessment and Evaluation in Higher Education,* 21, pp. 5-15.

BIGGS, J. B. (1996b) "Enhancing Teaching through Constructive Alignment", *Higher Education,* 32, pp. 1-18

BIGGS, J. B. (2003) *Teaching for Quality Learning at University: what the student does,* Second Edition, Society for Research into Higher Education & Open University Press, Buckingham, UK.

BILLIG, D. (1986) "Judging institutions", in Moodie, G. C. (ed) *Standards and Criteria in Higher Education,* Society for Research into Higher Education and NFER-Nelson, Guildford, UK.

BINNEY, G. (1992) *Making Quality Work: Lessons from Europe's Leading Companies*, The Economist's Intelligence Unit, London, UK

BLACK, S. A. AND PORTER, L. J. (1996) "Identification of the critical factors of TQM", *Decision Sciences,* Vol. 27, pp. 1-21

BLACKWELL, R. (2002) "Eye on you: Peer observation of Teaching – a way out of the quality quagmire?", The Times Higher Education Supplement, THES, pp. 6-7, March 15, London, UK.

BLAIR, T. (1997) "Social Exclusion Unit in the Cabinet Office", The Observer, November 23.

BLAKE, R. R. AND McCANSE, A. A. (1985) *Leadership Dilemmas – Grid Solutions*, Gulf Publishing Company.

BLAKE, R. R. AND MOUTON, J. S. (1985) *The Managerial Grid III*, Gulf Publishing Company.

BLAZEY, M. L. (1997) *Insights To Performance Excellence,* American Society for Quality (ASQ), Quality Press, Milwaukee, WI.

BLEICHER, K. (1994) "Integrative Management in a Time of Transformation", *Long Range Planning,* Volume 27, Number 5, pp. 136-144, October.

BOADEN, R. J. (1997) "What is TQM ...and does it matter?" *TQM*, Vol. 8.

BOADEN, R. J. AND DALE, B. D. (1994) "A generic framework for managing quality improvement: theory and practice", *Quality Management Journal,* July, pp. 11-24.

BONVILLIAN, G. AND DENNIS, T. (1995) "Total quality management in higher education: opportunity and obstacles", in Sims, S. J. and Sims, R. R. (eds) *TQM in Higher Education: Is it Working?,* Greenwood Publishing Westport, CT.

BORN, G. (1994) *Process Management to Quality Improvement,* John Wiley, Chichester, UK.

BOUNDS, G., BROOKS, L., ADAMS, M. AND RANNY, G. (1996) *Beyond Total Quality Management: towards the emerging paradigm*, McGraw Hill.

BOYNTON, A. C. AND ZMUD, R. W. (1984) "An assessment of critical success factors", *Sloan Management Review,* 21(4), pp. 17-27, Summer.

BRENNAN, J. (1997) "Authority, legitimacy and change: the rise of quality assessment in higher education", *Higher Education Management,* 9, 1, pp. 7-29.

BRENNAN, J. AND SHAH, T, (2000) *Managing Quality in Higher Education*, Open University Press, Buckingham, UK.

BREW, A. (1999) "Towards autonomous assessment: using self-assessment and peer-assessment", in Brown S. and Glasner, A. (eds) *Assessment Matters in Higher Education,* Society for Research into Higher Education and Open University Press, Buckingham, UK.

BRITISH QUALITY FOUNDATION (2000) *The Model in Practice: Using the EFQM Excellence Model to deliver continuous improvement*, BQF, Ashford Colour Press, London, UK.

BRITISH QUALITY FOUNDATION (2002) Application of the EFQM Excellence Model in the Public Sector, BQF, London, March, www.quality-foundation.co.uk

BROCKBANK, A. AND McGILL, I. (1998) *Facilitating Reflective Learning in Higher Education,* Society for Research into Higher Education and Open University Press, Buckingham, UK.

BRYMAN, A. AND BURGESS, R. G. (1994) *Analysing Qualitative Data,* Routledge, London.

BULMER, M. (1979) "Concepts in the analysis of qualitative data", *Sociological Review,* 27, pp. 651-677.

BURELLO, L. C. AND ZADNIK, D. J. (1986) "Critical Success Factors of Special Education Administrators", *Journal of Special Education,* 29, pp. 367-377.

BURGESS, R. G. (1984) *In the Field: An Introduction to Field Research,* Contemporary Social Research: 8, Series Editor: Martin Bulmer, George Allen & Unwin, London.

BURKHALTER, B. B. (1996) "How can institutions of higher education achieve quality within the new economy", *Total Quality Management*, Vol. 7, No. 2, pp. 153-160

BURNS, J. M. (1987) *Leadership,* Harper & Row, New York, NY

BUSH, T. (2003) *Theories of Educational Leadership and Management,* Third Edition, SAGE Publications, London, UK

BUSH, T. AND GLOVER, D. (2003) *School Leadership: Concepts and Evidence, National College for School Leadership,* Nottingham, UK

BUSHAWAY, R. W. (2003) *Managing Research: Guide to Good Practice,* Managing Universities and Colleges, Open University Press, Maidenhead, UK.

BYRD, C. (1940) *Social Psychology*, Appleton-Century-Crofts.

CAMBRIDGE, (2003a) Planning and Building, University of Cambridge, June, www.cam.ac.uk/building

CAMBRIDGE, (2003b) "International Excellence", Department of Chemical Engineering, University of Cambridge, December, www.cam.ac.uk//building

CANNON, T. (1992) "Quality Assurances", *Times Higher Education Supplement*, September 11.

CARNOY, M. (1994) *Economics of Education: Research and Studies,* Pergamon, Oxford, UK.

CARUANA, A. AND PITT, L. (1997) "INTQUAL: An internal measure of service quality and the link between service quality and business performance, *European Journal of Marketing,* 31 (8), pp. 604-616

CHADWICK, P. (1995) "TQM at South Bank University: issues in teaching and learning", *MCB Quality Assurance in Education*, Vol. 3, Issue 1, *www.emerald-library.com*

CHENG, Y.C. AND TAM, W.M. (1997) "Multi-models for quality in education", *Quality Assurance in Education,* Vol.5, No.1, MCB University Press, www.emerald-library.com

CHURCHILL JR., G. A. (1999) *Marketing Research: Methodological Foundations*, Seven Edition, The Dryden Press, London.

CHURCHILL JR., G. A. (2000) *Marketing Research: Methodological Foundations*, Seven Edition, The Dryden Press, London.

CHURCHILL JR., G. A. AND IACOBUCCI, D. (2002) *Marketing Research: Methodological Foundations*, Eighth Edition, The Dryden Press, London, UK.

CIPFA (2001) *A Review of the Code of Practice on Local Authority Accounting in the United Kingdom: The Local Authority SORP,* The Chartered Institute of Public Finance and Accountability, CIPFA, April, www.cipfa.org.uk/pt/

CLARK, B. R. (1983) *The Higher Education System,* University of California Press, Berkeley, CA.

CLARK, B. R. (1993) *The Research Foundations of Graduate Education: Germany, Britain, France, United States, Japan,* University of California Press, Berkeley, CA.

CLARK, B. R. (1998) *Creating Entrepreneurial Universities: Organisational Pathways of Transformation,* Pergamon Press, Oxford, UK.

CLARKE, C. (2003) "Forward by the Secretary of State for Education and Skills", in *UK Government White Paper: The Future of Higher Education – 2002-2006,* pp. 2-3, Department of Education and Skills, DfES, London, January.

CLAYTON, M. (1995) "Encouraging the 'Kaizen' approach to quality in a university", *Total Quality Management,* 6, (5-6): 593-601.

COATE, L. E. (1993) "The introduction of total quality management at Oregon State University", *Higher Education,* Vol. 25, No. 3, pp. 303-320.

COATE, L. E. (1999) "Implementing total quality management in a university", *Strategies for Quality Improvement,* Second Edition, pp. 591—628, Dryden, New York.

COHEN, L., MANION, L. AND MORRISON, K. (2003) *Research Methods in Education,* Fifth Edition, Routledge Falmer, London.

COLE, N. S. (1990) "Conceptions of educational achievement, *Educational Researcher,* 18 (3), pp. 2-7.

COLEMAN, K. G. (1958) "Relational analysis: the study of social organisations with survey methods", *Human Organisation,* Vol. 16, No. 4, pp. 28-36.

COLLINS (2000) *Collins Concise Dictionary: 21st Century Edition,* HarperCollins Publishers, Glasgow, UK.

COLLINS, R. (1994) *Four Sociological Traditions: New York and Oxford,* Oxford University Press, Oxford, UK.

CONNOR, H. (1999) "Different Graduates, Different Labour Market: Is There a Mismatch in Supply-Demand?" in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 90-104, Jessica Kingsley Publishers, London.

CONNOR, H. AND PEARSON, R. (1986) *Information Technology Manpower into the 1990s,* Institute for Employment Studies, Brighton, UK.

CONTI, T. (1993) *Building Total Quality: A Guide to Management,* Chapman and Hall, London.

CONTI, T. (1997) "Optimising self-assessment", *Total Quality Management,* Volume 8, Numbers 2 & 3.

COSTIN, H. (1999) "Total quality management in higher education institutions", *Strategies for Quality Improvement,* Second Edition, pp.583-590, Dryden, New York.

COWAN, J. (1998) *On Becoming an Innovative Teacher,* Open University Press, Buckingham, UK.
COYLE-SHAPIRO, J. C. (1993) The Quality Guru's Working Paper - Unpublished, in Dale, B. G. (1999) *Managing Quality,* Third Edition, pp.198-216, Blackwell, London, UK

CRAINER, S. (1995) "Have the Corporate Superheroes had their Day?" *Professional Manager,* March, pp. 8-12.

CROSBY, P. B. (1979) *Quality is Free: The Art of Making Quality Certain,* Penguin Books, New York

CUTHBERT, R. (1999) "An Institutional Perspective on Managing Change", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 307-324, Jessica Kingsley Publishers, London, UK

CZEPIEL, J. A. SOLOMON, M. R. AND SURPRENANT, C. F. (1985) *The Service Encounter: Managing Employee/Customer Interaction in Service Businesses,* Lexington Books, Lexington, Massachusetts

DALE, B. G. (1999) *Managing Quality,* Third Edition, Blackwell, UK

DALE, B. G. AND PLUNKETT, J. J. (1990) *The Case for Costing Quality,* Department of Trade and Industry, DTI, London, UK

DALE, B.G. AND LIGHTBURN, K. L. (1992) "Continuous quality improvement: why some organisations lack commitment", *International Journal of Production Economics*, 27(1).

DANIEL, D. R. (1961) "Management Information Crisis", *Harvard Business Review,* 39, pp. 111-121.

DAVENPORT, T. H. AND SHORT, J. E. (1990) "The New Industrial Engineering: information technology and business process re-design", *Sloan Management Review,* 31(4), pp. 11-27

DAVIES, A. AND KIRKPATRICK, I. (1995) " Performance indicators, bureaucratic control and the decline of professional autonomy: The case of academic librarians", in KirkPatrick, I. and Lucio, M. M. (eds) *The Politics of Quality in the Public Sector,* pp. 84-107, Routledge, London, UK.

DE RAAD, G. (1996) "The EFQM: latest developments", *TQM In Action*, (ed) Kanji, G. K., Chapman and Hall.

DE WIT, B. AND MEYER, (1999) *Strategy: Process, Content, Context*, Second edition, ITB Press.

DEARING, R. (1997) *Higher Education in the Learning Society: Report of the National Committee,* The Stationery Office, HMSO, London, UK.

DEARING, R. (2003) "Three cheers for fees but what about growth?" *Times Higher Education Supplement,* THES, January 31, London, UK.

DEMING, W. E. (1991) *The New Economics for Industry, Government, Education,* Massachusetts Institute of Technology Center for Advanced Engineering Study, Cambridge, MA.

DEMING, W.E. (1982) *Quality, Productivity and Competitive Position*, Cambridge, Massachusetts, MIT, Centre of Advanced Engineering Study.

DEMING, W.E. (1986) *Out of the Crisis*, Cambridge, Massachusetts, MIT, Centre of Advanced Engineering Study.

DEPARTMENT OF EDUCATION AND SKILLS (2003) The Future of Higher Education: creating opportunity, releasing potential, achieving excellence, Department for Education and Skills, DfES, UK Government White Paper, pp. 1-106, January, London, UK.

DERBY (2000a) *Ethical Policy and Guidelines for Research*, SRD12/001, University of Derby, September 20 www.derby.ac.uk

DERBY (2000b) *Undergraduate Prospectus, 2000-01*, University of Derby, September 20 www.derby.ac.uk

DERBY (2003a) Staff Guide to the Implementation of HE Academic Regulations, Policies and Procedures – 2003-2004, Quality Enhancement Department, University of Derby, www.derby.ac.uk

DERBY (2003b) "International Students", 2003 Postgraduate Prospectus: Your Guide to Full-time, part-time, postgraduate and professional courses, pp.17, University of Derby, www.derby.ac.uk

DfES (2003) *The Future of Higher Education: creating opportunity, releasing potential, achieving excellence,* Department for Education and Skills, DfES, UK Government White Paper, pp. 1-106, January, London, UK.

DILL, D. D. AND SPORN, B. (1995) "The implications of a post industrial environment for the University: an introduction", in Dill, D. D. and Sporn, B. (eds) *Emerging Patterns of Social Demand and University Reform: Through a Glass Darkly,* IAU Press and Pergamon, Trowbridge.

DILLMAN, D. A. (1978) *Mail and Telephone Surveys: The Total Design Method,* New York, Wiley.

DILLMAN, D. A. (2000) *Mail and Internet Surveys: The Tailored Design Method,* Second Edition, Wiley, New York

DOHERTY, G. D. (1994) "The Concern for Quality". In: G. D. Doherty (ed) *Developing Quality Systems in Education,* Routeledge, London, UK

DRUCKER, P. F. (1989) *The Practice of Management*, Heinemann Professional

DU BOIS, J. W., SCHUETZE-COBURN, S., CUMMING, S. AND PAOLINO, D. (1993) "Outline of Discourse Transcription", in Edwards, J. and Lampert, M. (eds) *Talking Data: Transcription and Coding in Discourse Research,* Lawrence Erlbaum, Hillsdale, NJ.

DUNKIN, M. AND BIDDLE, B. (1974) *The Study of Teaching,* Holt, Rinehart & Winston, New York.

EASTERBY-SMITH, M., THORPE, R. AND LOWE, A. (1991) Management Research: An Introduction, SAGE Publications. London.

EASTERBY-SMITH, M., THORPE, R. AND LOWE, A. (2002) Management Research: An Introduction, SAGE Publications. London.

EDWARDS, J. A. AND LAMPERT, M. D. (1993) *Talking Data: Transcription and Coding in Discourse Research,* Lawrence Erlbaum, Hillsdale, NJ.

EFQM (1998) *Self-Assessment 1998: Guidelines for Companies,* Brussels.

EFQM (1999) *Changes in the New EFQM Model,* Brussels

EFQM (2000) "The EFQM Excellence Model", June, www.efqm.org

EFQM (2002) "The EFQM Excellence Model", May, www.efqm.org

EFQM (2003a) *Introducing Excellence: Using the EFQM Excellence Model to Improve Performance*, European Foundation for Quality Management, EFQM, Brussels, December, www.efqm.org

EFQM (2003b) *The Fundamental Concepts of Excellence*, European Foundation for Quality Management, EFQM, Brussels, December, www.efqm.org

ENTWISTLE, N. AND RAMSDEN, P. (1983) *Understanding Student Learning,* Croom Helm, London, UK

EPSRC (1997) *Joint EPSRC/University Exploitation Audit Pilot Exercise: Research Exploitation Audit Process (REAP) Report – People, Partnership and Programmes,* Engineering and Physical Sciences Research Council (EPSRC), London, February.

EQUIS (1999) *What is EQUIS*?, European Quality Improvement System, EQUIS, December, *www.efmd.be/equis/*

EQUIS (2002) *The European Quality Improvement System: An Overview,* EQUIS, January, *www.efmd.be/data/equis/overview*

ETZIONI, A. (1964) *Modern Organisations,* pp. 17, Prentice-Hall

EUROPEAN COMMISSION (1991) *Memorandum on Higher Education,* EC, Brussels

EVANS, J. R. (1996) "What should higher education be teaching about quality?, *Quality Progress,* Vol. 29, pp. 83-88

EVANS, J. R. AND LINDSAY, W. M. (1999) *The Management and Control of Quality*, Fourth Edition, Cincinnati, South Western College Publishing.

EVERS, C. W. AND LAKOMSKI, G. (1991) *Knowing Educational Administration,* Pergamon, Oxford, UK

EVERS, C. W. AND LAKOMSKI, G. (2001) "Theory in educational administration: naturalistic directions", *Journal of Educational Administration,* Vol. 39, No. 6, pp. 499-520, MCB University Press, *www.emerald-library.com*

FAYOL, H. (1950) *General and Industrial Management,* Pitman.

FEIGENBAUM, A.V. (1956) "Total Quality Control", *Harvard Business Review*, Nov-Dec.

FEIGENBAUM, A.V. (1983) *Total Quality Control*, Third Edition, McGraw Hill, New York

FEIGENBAUM, A.V. (1991) *Total Quality Control*, Fouth Edition, McGraw Hill, New York

FIELDLER, F. E. (1967) *A Theory of Leadership Effectiveness*, McGraw-Hill

FINCH, J. (1997) "Power, legitimacy and academic standards", in Brennan, J., de Vries, P. and Williams, R. (eds) *Standards and Quality in Higher Education,* Jessica Kingsley, London.

FINK, A. (1995a) *The Survey Handbook,* The Survey Kit, Number 1, SAGE Publications, London.

FINK, A. (1995b) *How To Report On Survey,* The Survey Kit, Number 9, SAGE Publications, London.

FINK, A. (1995c) *How To Analyse Survey Data,* The Survey Kit, Number 8, SAGE Publications, London.

FLEISHMAN, E. A. (1974) 'Leadership Climate, Human Relations Training and Supervisory Behaviour', in Fleishman, E. A. and Bass, A. R. *Studies in Personnel and Industrial Psychology,* Third Edition, Dorsey.

FLICK, U. (1998) *An introduction to qualitative research: theory, method and applications,* SAGE Publications, London.

FLOOD, R. L. (1993) *Beyond TQM*, John Wiley, Chichester, UK

FLOOD, R. L. (1996) *Beyond TQM*, John Wiley, Chichester, UK

FLOOD, R. L. AND JACKSON, M. C. (1991) *Creative Problem Solving,* Wiley, Chichester, UK

FOWLER, A. (1987) "When chief executives discover HRM", *Personnel Management,* January.

FREDERICKS, M., WESTERHEIJDEN, D. F. AND WEUSTHOF, P. (1994) "Effects of quality assessment in Dutch higher education", *European Journal of Education,* 29, pp. 101-118.

FRENCH, J. R. P. AND RAVEN, B. (1968) 'The Bases of Social Power', in Cartwright, D. and Zander, A. F. (eds) *Group Dynamics: Research and Theory*, Third Edition, Harper & Row, New York, NY.

FRENCH, R. AND GRAY, C. (1996) *Rethinking Management Education*, Sage Publication, London, UK

GAITHER, N. (1996) *Production and Operations Management,* pp.7, Duxbury Press, Cincinnati, OH.

GALLOWAY, L. (1998) "Quality perceptions of internal and external customers: a case study in education administration", *MCB The TQM Magazine*, Vol.10, Issue 1, www.emerald-library.com

GARVIN, D. A. (1984) "What Does 'Product Quality' Really Mean?", *Sloan Management Review,* pp. 25-45, Fall

GARVIN, D. A. (1988) *Managing Quality: The Strategic and Competitive Edge*, The Free Press, New York, NY.

GARVIN, D. A. (1991) "How the Baldrige Award really works", *Harvard Business Review,* pp. 80-93, November-December.

GEDDES, T. (1993) "The total quality initiative at South Bank University", *Higher Education,* Vol. 25, No. 3, pp. 341-361

GEORGE, C., COOPER, F. AND DOUGLAS, A. (2001) "Implementing the EFQM Excellence Model in a Local Authority", in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 & TQM: Integrated Management, pp. 573-577,* 17-19 April, Ayr, Ayrshire, Scotland, UK.

GEORGE, S. AND WEIMERSKIRCH, A. (1995) *Total Quality Management: strategies and techniques proven at today's most successful companies*, John Wiley.

GHISELLI, E. E. (1963) 'Management Talent', *American Psychologist*, Vol. 18, October, pp. 631-642.

GHOBADIAN, A. AND GALLEAR, D. N. (1996) "Total Quality Management in SMEs", *Omega*, Vol. 24, No.1.

GINSBERG, H. P. AND OPPER, S. (1988) *Piaget's Theory of Intellectual Development,* Third Edition, Prentice Hall, London.

GLASNER, A. (2000) "The challenge of change: managing the modern agendas", Proceeding of the International Conference on Quality in Higher Education in the New Millennium, University of Derby, UK, pp. 165-178, 24/25 August

GODDARD, A. (2003) "RAE Reform to shut out one in three", The Times Higher Education Supplement, THES, pp.1-2, May 30, London, UK.

GODFREY, G., AND WILKINSON, A. (1998) *Adopting Best Practice HRM in a TQM Context,* Working Paper, Manchester School of Management, UMIST, UK

GODFREY, G., WILKINSON, A., MARCHINGTON, M. AND DALE, B. G. (1998) *Vision, Deployment and Practice, TQM and HRM in Manufacturing,* Quality Management Centre Occasional Paper, Manchester School of Management, UMIST, UK

GORDON, R. A. AND HOWELL, J. E. (1959) *Higher Education for Business,* Columbia University Press, New York.

GOW, L. AND KEMBER, D (1993) "Conceptions of teaching and their relation to student learning, *British Journal of Educational Psychology,* 63, pp.20-33.

GOWAN, JR., J. A. AND MATHIEU, G. R. (1996) "Critical factors in Information System Development for a flexible manufacturing system", *Computers in industry,* 28, pp. 173-183.

GREEN, D. (1994) What is Quality in Higher Education? Society for Research into Higher Education and Open University Press, Buckingham, UK

GREENBERG, J. AND BARON, R. A. (1997) *Behaviour in Organizations*, Sixth Edition, Prentice-Hall.

GRETTON, I. (1995) 'Taking the Lead in Leadership', *Professional Manager*, January, pp. 20-22.

GREY, C. (1998) "Business of being allies", *Times Higher Education Supplement*, September 25.

GRINYER, M. AND GOLDSMITH, H. (1995) *Benchmarking for Competitive Advantage*, BBC for Business Publications.

GRONROOS, C. (1984) *Strategic Management and Marketing in the Service Sector,* Chartwell-Bratt, UK.

GUARDIAN (2003a) "The Guardian Appointments", The Guardian Education, pp. 18-42, London, UK

GUARDIAN (2003b) "Universityguide - Redbricks", The Guardian Education, pp. 10-39, May 20, London, UK

GUBRIUM, J. F. AND HOLSTEIN, J. A. (2002) *Handbook of Interview Research: Context and Methods,* SAGE Publications, London.

GUEST, D. (1987) "HRM and Industry Relations", *Journal of Management Studies,* 24(5), pp. 503-522

GUEST, D. (1989) "Personnel and HRM: Can you fell the difference?", *Personnel Management,* January

GUEST, D. (1991) "Personnel Management: the end of orthodoxy", *British Journal of Industrial Relations,* 29, 2, June

HACKMAN, J. R. AND WAGEMAN, R. (1995) "Total Quality Management: empirical, conceptual and practical issues", *Administrative Science Quarterly*, Vol. 40, N0. 2.

HAKES, C. (1996) *The Corporate Self-Assessment Handbook,* Chapman and Hall, London, UK

HAMMER, M. (1990) "Re-engineering work: don't automate, obliterate", *Harvard Business Review,* 68(4), pp. 104-112.

HAMMER, M. AND CHAMPY, J. (1993) *Re-engineering the Corporation*, Nicholas Brealey, London, UK

HARARI, O. (1993) "Ten reasons why TQM doesn't work", *Management Review*, January.

HARRINGTON, H. J. (1987) "The quality improvement process", *Healthcare Forum,* Vol. 30, No. 3, pp. 81-83, May-June.

HARRINGTON, H. J. (1998) "Performance Improvement: the rise and fall of re-engineering", *The TQM Magazine,* 10(2), pp. 69-71.

HARRIS, M. (1998) *A Review of Postgraduate Education,* Higher Education Funding Council for England, HEFCE, Bristol, UK

HARVARD BUSINESS REVIEW (1991) "An Open Letter: TQM on Campus", November-December.

HARVEY, L. (1990) *Critical Social Research,* Contemporary Social Research Series: 21, Unwin Hyman, London.

HARVEY, L. (1995) *Quality in Higher Education Project: TQM and the New Collegialism*, University of Central England, Birmingham, UK.

HARVEY, L. AND GREEN, D. (1993) "Defining quality", *Assessment and Evaluation in Higher Education,* Vol.18, No.1, pp. 8-35.

HARVEY, L. AND KNIGHT, P. (1996) *Transforming Higher Education*, Society for Research into Higher Education, Open University Press, Buckingham, UK.

HARVEY, P. (2001) "Exeter University: Going Back to the Future?" in Warner D. and Palfreyman (eds) *The State of UK Higher Education: Managing Change and Diversity,* Society for Research into Higher Education & Open University Press, pp. 37-48, Buckingham, UK.

HAYTON, A. (1999) Tackling Disaffection and Social Exclusion: Education perspectives and policies, Kogan Page, London, UK.

HEFCE, (1993) Audit Code of Practice, Circular 29/93,, Higher Education Funding Council for England, HEFCE, Bristol, UK.

HEFCE, (1994a) *Profiles of Higher Education Institutions,* Higher Education Funding Council for England, HEFCE, Bristol, UK.

HEFCE (1994b) *The Quality Assurance Method from April 1995,* Circular 39/94, Higher Education Funding Council for England, HEFCE, London, October.

HEFCE (1994c) *Value for Money Studies in the Higher Education Sector,* Circular 39/94, Higher Education Funding Council for England, HEFCE, Bristol, UK.

HEFCE, (1997a) *Report on Quality Assessment 1995-1996*, Higher Education Funding Council for England, HEFCE, London, January.

HEFCE, (1997b) *Fund for the Development of Teaching and Learning (FDTL) Phase One,* DENI Award, Higher Education Funding Council for England, HEFCE, London, January.

HEFCE (2002) *Research Relationships Between Higher Education Institutes and the Charitable Sector: Policy Report,* Higher Education Funding Council for England (HEFCE), London.

HEFCE (2003a) *Review of Research Assessment Report by Sir Gareth Roberts to the UK Higher Education Funding Bodies,* pp. 1-20, UK, May, www.hefce.ac.uk

HEFCE (2003b) *Institutional Responses: invitation to contribute*, RA Review, Higher Education Funding Council for England, HEFCE, April, Bristol, www.ra-review.ac.uk/invite/responses

HELLSTEN, U. AND KLEFSJO, B. (2000) "TQM as a management system consisting of values, techniques and tools", *MCB The TQM Magazine*, Vol. 12, Issue 4, www.emerald-library.com

HELM, M. M., WILLIAMS, A. B. AND NIXON, J. C. (2001) "TQM principles and their relevance to higher education: the question of tenure and post-tenure review", *The International Journal of Educational Management,* 15/7, pp. 322-331, MCB University Press, www.emerald-library.com

HENKEL, M. AND LITTLE, B. (1999) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series, Jessica Kingsley Publishers, London, UK.

HERMEL, P. AND RAMIS-PUJOL, J. (2001) "An Evolution of Excellence: Some Main Trends", *Proceedings of the Second MAAOE International Conference 'Towards A Sustainable Excellence: Strategy, Quality, Innovation?,* Part I, Hermal (ed) University of Versailles Saint-Quentin-en-Yvelines, pp. 273-289, France.

HERSEY, P. AND BLANCHARD, K. H. (1993) *Management of Organizational Behaviour: Utilizing Human Resources,* Sixth Edition, Prentice-Hall.

HERZBERG, F. W., MAUSNER, B. AND SNYDERMAN, B. B. (1959) *The Motivation to Work,* Second Edition, Chapman and Hall.

HESA (2001) *Students in Higher Education Institutions – 1999/2000,* Higher Education Statistics Agency (HESA), Cheltenham, UK

HESA (2002) HE Planning Plus 2002, Higher Education Statistics Agency, HESA, Cheltenham, UK

HEWITT, F. AND CLAYTON, M. (1999) "Quality and complexity – lessons from English higher education", *MCB International Journal of Quality and Reliability Management,* Vol.16, Issue 9, MCB University Press www.emerald-library.com

HILEY, T. J. (2000) "Research Without Easy Answers: Overcoming Fragmentation and Reductionism", in Edgeman, R. and Hensler, D. (eds) *Proceedings of the First International MAAOE Conference on Organizational Excellence,* pp. 139-147, 6-9 August, Estes Park, CO, USA.

HILLMAN, P. G. (1994) "Making Self-assessment successful", *The TQM Magazine,* 6 (3), pp. 29-31.

HO, A. (2001a) "A conceptual change approach to university staff development", in Watkins, D. and Biggs, J. (eds) *Teaching the Chinese Learner Psychological and Pedagogical Perspectives,* Comparative Education Research Centre, Australian Council for Educational Research, Camberwell, Victoria, Australia.

HO, S. K. M. (2001b) "Integrated Management through ISO 9000:2000 & TQM", in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 & TQM: Integrated Management,* pp. 13-18, 17-19 April, Ayrshire, Scotland.

HO, S. K. and WEARN, K. (1996) "A TQM model for enabling student learning", *Innovation in Training and Education International,* Vol. 33, No. 3, pp. 178-184.

HO, S. K. M. AND FUNG, C. K. H. (1994) "Developing a TQM Excellence Model", *The TQM Magazine,* Vol. 6, No. 6, pp. 24-30, MCB University Press, www.emerald-library.com

HODSON, P. J. AND THOMAS, H. G. (1999) "Towards an Enterprise Culture: Will the Quality Assurance Agency help or hinder?" *Higher Education Review,* Vol. 32, No. 1, pp.24-31.

HOFFMAN, A. M. AND JULIUS, D. J. (1995) *TQM: Implications for Higher Education,* Prescott Publishing, Missouri, USA.

HOLLOWAY, J. (1994) "Is there a place for total quality management in higher education?" in Doherty, G. D. (ed) *Developing Quality Systems in Education,* Routledge, London.

HOLMES, G. AND McELWEE, G. (1995) "TQM in higher education how to approach human resource management", *MCB The TQM Magazines,* Vol. 7, Issue 6, www.emerald-library.com

HOUSE, R. J. AND DESSLER, G. (1974) 'The Path-Goal Theory of Leadership', in Hunt, J. G. and Larson, L. L. (eds) *Contingency Approaches to Leadership*, Southern Illinois University Press.

HUGHES, G. D. AND CHAFFIN, D. C. (1996) "Turning new product development into continuous learning process", *Journal of Product Innovation and Management,* 13, pp. 89-104.

HUGHES, N. (1993) Total Quality Management in Higher Education: The application of Information Technology. A PhD Dissertation, University of Nebraska, Lincoln, Nebraska.

HUNT, J. W. (1992) *Managing People at Work*, Third Edition, McGraw-Hill.

HUSSEY, J. AND HUSSEY, R. (2000) *Business Research: A practical guide for undergraduate and postgraduate studies,* Macmillan.

ISHIKAWA, K. (1985) *What is Total Quality Control? The Japanese Way*, Prentice Hall, Engelwood Cliffs, NJ.

ISO (1986) Quality *Management and Quality Assurance – Terminology of the International Standards Organization*, Part 1 Vocabulary.

ISO (1994) *ISO 9000: Quality Management and Quality Assurance Standards – Part 1: Guidelines for Selection and Use,* International Organisation for Quality, Geneva.

JACKSON, M. C. (1991) *Systems Methodology for the Management Sciences,* Wiley, Chichester, UK

JACKSON, P. M. (1982) *The Political Economy of Bureaucracy,* Philip Allan, London, UK.

JANKOWICZ, A. D. (1995) *Business Research Projects for Students*, Chapman and Hall, London, UK

JARRAR, Y. F. AND ZAIRI, M. (2000a) "Internal transfer of best practice for performance excellence: a global survey", Benchmarking: An International Journal, Vol. 7, No. 4, pp.239-246, MCB University Press, Bradford, UK.

JARRAR, Y. F. AND ZAIRI, M. (2000b) "Best Practice transfer for future competitiveness: a study of best practices", *Total Quality Management*, Vol. 11, Nos. 4-6.

JENNINGS, E. E. (1961) 'The Anatomy of Leadership', *Management of Personnel Quarterly*, Vol. 1, No. 1, pp. 2, Autumn

JENSEN, M. C. (2000) "Value Maximization and the Corporate Objective Function", in Beer, M. and Nohria, N. (eds) *Breaking the Code of Change,* pp. 37-57, Harvard Business School Press, Boston.

JENSTER, P. V. (1987) "Using critical success factors in planning", *Long Range Planning,* Vol. 20, No. 4, pp. 102-109.

JOHNSON, G. AND SCHOLES, K. (2002) *Exploring Corporate Strategy: Text and Cases,* Fifth Edition, Prentice Hall, Hemel Hempstead, UK.

JOHNSON, G. AND SCHOLES, K. (2003) *Exploring Corporate Strategy: Text and Cases,* Sixth Edition, Prentice Hall, Hemel Hempstead, UK.

JURAN, J. M. (1988) *Quality Control Handbook,* McGraw Hill, New York

JURAN, J. M. (1989) *Juran on Leadership for Quality,* Free Press, *Mc*Graw Hill, New York

JURAN, J.M. (1992) *Juran on Quality by design: the New Steps for Planning into Goods and services,* The Free Press, New York.

KANJI, G. K. (1996) "Implementation and pitfalls of total quality management", *Total Quality Management,* 7, pp. 331-343

KANJI, G. K. (1998) "Measurement of Business Excellence", *Total Quality Management,* 9, pp. 633-643.

KANJI, G. K. (2003) "Leadership Excellence - CSFs", pp. 1-11, Kanji Quality Culture Ltd., *www.kanjis-leadership.com*

KANJI, G. K. AND MALEK, A. (1999) "TQM in US higher education", In: *Best on Quality,* IAQ Book Series, Vol.10, ASQ Quality Press, Wisconsin.

KANJI, G. K. AND TAMBI, A. M. (1999) "Total Quality Management in UK Higher Education Institutions", *Total Quality Management,* Vol. 10, No. 1, pp. 129-153, CARFAX Publishing, London, UK.

KANJI, G. K. AND TAMBI, A. M. (2002) *Business Excellence in Higher Education,* Kingsham Press, Sussex, UK.

KANJI, G. K., MORRIS, D. S. AND HAIGH, R. H. (1993) "Philosophical and system dimensions of TQM: a further education case study", *Proceedings of the Advances in Quality Systems for TQM,* The Management College of National Jian Tong University, Taiwan.

KANJI, G.K. (2000) Personal discussion on TQM and EFQM in Higher Education, International Conference on Quality in Higher Education in the New Millennium, University of Derby, UK, 24/25 August.

KANJI, G.K., TAMBI, A. M. AND WALLACE, W. (1999) "A comparative study of quality practices in higher education institutions in the US and Malaysia", *Total Quality Management,* Vol. 10, No. 3, pp. 357-371, CARFAX Publishing.

KAPLAN, R. S. AND NORTON, D. P. (1996) *The Balanced Scorecard: Translating Strategy into Action,* Harvard Business School Press.

KEARNEY, A. T. (1992) *Total Quality: Time to Take Off the Rose Tinted Spectacles,* Bedfordshire, UK.

KEARNEY, M. H., MURPHY, S. AND ROSENBAUM, M. (1994) "Mothering on Crack Cocaine: A Grounded Theory Analysis", *Social Science and Medicine,* 38, pp. 351-361.

KEMBER, D. (2000) *Action Learning and Action Research: Improving the Quality of Teaching and Learning,* Kogan Page, London, UK.

KERR, C. (1987) "A Critical age in the university world: accumulated heritage versus modern imperatives", *European Journal of Education,* 22 (2), pp. 127-132.

KESSLER, S. (1993) "Is there still a future for unions?", *Personnel Management,* July.

KLIENDORFER, P. R. (1994) "TQM at the University of Pennsylvania", *MCB Managing Service Quality*, Vol.4, Issue 4, *www.emerald-library.com*

KNIGHT, P.T. AND TROWLER, P. R. (2001) *Departmental Leadership in Higher Education,* Society for Research into Higher education and Open University Press, Buckingham, UK.

KOGAN, M. (1996) "Government and the reform of higher education in the UK: a preliminary historical analysis", *Working Paper No. B23, International Study of Higher Education Reforms*, Brunel University, London, UK

KOGAN, M. (1999) "Academic and Administrative Interface", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 263-279, Jessica Kingsley Publishers, UK.

KONDO, Y. (2001) "Quality is the Center of Integrated Management", in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 & TQM: Integrated Management,* pp. 25-30, 17-19 April, Ayr, Ayrshire, Scotland, UK.

KOTLER, P. AND ARMSTRONG, G. (1996) *Principles of Marketing,* Seventh Edition, Prentice, Englewood Cliffs, NJ.

KOTTER, J. P. (1990) What Leaders Really Do', *Harvard Business Review*, May-June, pp. 103.

KRECH, D., CRUTCHFIELD, R. S. AND BALLACHEY, E. L. (1962) *Individual in Society*, McGraw-Hill.

KREITNER, R. AND KINICKI, A. (1995) *Organizational Behaviour*, Third Edition, Irwin

KRIPPENDORF, K. (1980) *Content analysis: An introduction to its methodology,* SAGE Publications, Beverly Hills, CA.

KWANG, L. T. AND CHUAN, T. K. (2000) "Initiatives for achieving Total Quality in education", in Ho, S. K. M. and Leong, C. C. (eds) *Proceedings of the Fifth International Conference on ISO 9000 & TQM: Action 2000 – Imperatives for Improvement, Part 10: Business Excellence in Education,* pp. 494-498, Singapore, 25/27 April.

LASCELLES, D. M. AND DALE, B. G. (1991) "Levelling out the future", *Total Quality Management*, December.

LASCELLES, D. M. AND DALE, B. G. (1993) *The Road to Quality,* IFS Publications, Bedford, UK

LAWLER, E. E., MOHRMAN, S. A. AND LEDFORD, G. E. (1996) "Tenure: an outmoded concept?", *Creating High Performance Organisations,* Jossey-Bass, San Francisco, CA.

LEIDECKER, J. K. AND BRUNO, A. V. (1984) "Identifying and using Critical success factors", *Long range Planning,* 17, pp. 23-52.

LEVIN, H. (1991) "The Economics of Educational Choice", *Economics of Education Review*, 10, 2.

LEWIS, B. R. AND ENTWISTLE, T. W. (1990) "Managing the service encounter: a focus on the employee", *International Journal of Service Industry Management,* 1(3), pp. 41-52

LIKERT, R. (1961) *New Patterns of Management*, McGraw-Hill.

LINCOLN, Y. S. AND GUBA, E. G. (1985) *Naturalistic inquiry,* SAGE Publications, Beverly Hill, CA.

LINDQUIST, J. (1978) *Strategies for Change*, Pacific Surroundings Press, Berkeley, CA

LISTON, C. (1999) *Managing Quality and Standards,* Open University Press, Buckingham, UK.

LLOYDS-TSB (2001) *Quality in Education: School Self-assessment using the Excellence Model,* London.

LOMAS, L. (1999) "The culture and quality of higher education institutions: examining the links", Quality Assurance in Education, Vol.7, No.1, *MCB University Press*, www.emerald-library.com

LONGBOTTOM, D. (2002) Personal communications, Director of Studies, PhD Programme, Derbyshire Business School, University of Derby, United Kingdom, May.

LONGBOTTOM, D. AND MILLIGAN, J. (1999) "Self-Assessment: Route to Excellence or the Next Deadly Disease?" *Proceedings of the Fifth World Congress on Quality Management,* Monash University, Melbourne, Australia, January.

LONGBOTTOM, D. AND ZAIRI, M. (1996) "TQM in Financial Services: an empirical study of best practice", in Kanji, G. K. (ed) *TQM in Action*, Chapman and Hall, UK.

LOZIER, G. G. AND TEETER, D. J. (1996) "Quality improvement pursuits in America higher education", *Total Quality Management*, 7, pp. 189-201

LUKE, C. (1997) "Quality Assurance and Women in Higher Education", *Higher Education,* Vol. 33, pp. 433-451.

LYNCH, R. (1997) *Corporate Strategy, pp. 28,* Financial Times Pitman Publishing

MAASSEN, P. A. M. AND WESTERHEIJDEN, D. F. (1998) "Following the follow-up: a sketch of evaluation use in European higher education", in Scheele, J. P., Maassen, P. A. M. and Westerheijden, D. F. (eds) *To be Continued...Follow-up of Quality Assurance in Higher Education,* Elsevier/De Tijdstroom, Maarsen.

MACRAE, S., MAGUIRE, M. AND BALL, S. (1997) "Whose 'Learning' Society? A Tentative Deconstruction", *Journal of Education Policy,* Vol. 12, No. 6, pp. 499-509

MAIER, P. AND WARREN, A. (2000) *Integrating Technology in Learning and Teaching,* Kogan Page, London, UK

MALHOTRA, N. K. AND BIRKS, D. F. (2000) *Marketing Research: An Applied Approach*, European Edition, Financial Times Prentice Hall, London, UK.

MARCHESE, T. (1999) "TQM reaches academy", in *Strategies for Quality Improvement,* Second Edition, pp. 569-582, Dryden Press, New York.

MARCHINGTON, M. (1992) *Managing The Team: A Guide to Successful Employee Involvement,* Basil Blackwell, Oxford, UK

MARCHINGTON, M. AND WILKINSON, A. (1996) *Core Personnel and Development,* IPD, London, UK

MARCHINGTON, M. AND WILKINSON, A., DALE, B. G. (1993) *Quality and the Human Resource Dimension, The Case Study Report in Quality and the Human Resource Dimension, Institute of Personnel Management,* IPM, London, UK

MARTENSEN, A. AND DAHLGAARD, J. J. (1999) "Integrating Business Excellence and Innovation Management: developing vision, blueprint and strategy for innovation in creative and learning organisations", *Total Quality Management,* Vol. 10, No. 4 & 5, pp. 627-635.

MARTON, F. (1981) *"Phenomenography - describing conceptions of the world around us", Instrumental Science,* 10, pp. 177-200.

MARTON, F. AND BOOTH, S. A. (1997) *Learning and Awareness,* Lawrence Erlbaum, Hillsdale, NJ.

MARTON, F. AND DALL'ALBA, G. AND BEATY, E. (1993) "Conceptions of Learning"", *International Journal of Educational Psychology, 19*, pp. 277-300.

MARTON, F. AND SALJO, R. (1976) "On Qualitative Differences in Learning I: Outcome and Process", *British Journal of Educational Psychology,* 46, pp. 4-11.

MASLOW, A. H. (1943) "A Theory of Human Motivation", *Psychological Review,* 50, pp. 370-396, July

MAXCY, S. J. (2001) "Educational leadership and management of knowing: the aesthetics of coherentism", *Journal of Educational Administration,* Vol. 39, No. 6, pp. 573-588, MCB University Press, *www.emerald-library.com*

MAZUR, E. (1998) *Peer Instruction: A User's Manual*, Prentice Hall, Englewood, Cliffs, NJ.

MBNQA (1998) "Criteria for Performance Excellence", NIST Gaithersburg, USA, *www.quality.nist.gov*

MBNQA (1999) "Baldrige Index outperforms S and P 500 for fourth year", National Institute of Standards and Technology, NIST Gaithersburg, USA, February 9, *www.nist.gov/publicaffairs/stockstudy*

MBNQA (2002) *Education Criteria for Performance Excellence,* Baldrige National Quality Program, National Institute of Standards and Technology, NIST, Gaithersburg, MD, USA, November *www.quality.nist.gov*

MBNQA (2003a) *Getting Started with the Baldrige National Quality Program: Criteria for Performance Excellence,* Malcolm Baldrige National Quality Award, MBNQA, pp. 1-32, NIST Gaithersbury, USA, December, *www.quality.nist.gov/Getting_Started.html*

MBNQA (2003b) *Building World-Class Performance with the Badridge Criteria,* Malcolm Baldrige National Quality Award, MBNQA, December, *www.qualitydigest.com/aug99/html/body_baldrige.html*

McADAM, R. AND WELSH, W. (2000) "A critical review of the business excellence quality model applied to further education colleges", *MCB Quality Assurance in Education*, Vol.8, Issue 3, www.emerald-library.com

McCABE, A. (1997) "Constraints and Creativity", *Adults Learning,* 9, No. 2, pp. 17-19, October.

McGEE, C. (1991) "Total quality management in the university: creating a laboratory for learning about quality", in Petak, W. J. (ed) *Proceedings of Second Annual Symposium: Role of Academia in National Competitiveness and Total Quality Management,* Los Angeles, CA.

McGREGOR, D. (1987) *The Human Side of Enterprise*, Penguin.

McNAY, I. (1997) *The Impact of the 1992 RAE on Institutional Behaviour in English Higher Education - The Evidence from a Research Project*, Higher Education Funding Council for England, HEFCE, Bristol, UK.

McNAY, I. (1999) "The Paradox of Research Assessment", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 191-203, Jessica Kingsley Publishers, London.

MEISEL, E. AND SELTZER, J. (1995) "Rethinking management education: a TQM perspective", *Journal of Management Education,* Volume 19, Number 1, pp. 75-95.

MERGEN, E., GRANT, D. AND WIDRICK, S. M. (2000) "Quality management applied to higher education", *Total Quality Management,* Volume 11, Number 3, pp. 345-352.

MILES, M. B. (1959) *Learning to Work in Groups*, Columbia University.

MILES, M. B. (1979) "Qualitative data as an attractive nuisance: The problem of analysis", *Administrative Science Quarterly,* 24, pp. 590-601.

MILES, M. B. AND HUBERMAN, A. M. (1994) *Qualitative Data Analysis*, Second Edition, SAGE Publications, London.

MILLER, R. I. (1991) *Applying the Deming Method of Higher Education,* College and University Personnel Association, Washington, DC.

MINTZBERG, H. (1973) *The Nature of Managerial Work,* Prentice-Hall, Englewood Cliffs, New Jersey.

MORLEY, L. (1997) "Change and Equity in Higher Education", *British Journal of Sociology of Education,* Volume 18, Number 2, pp. 229-240.

MORLEY, L. (2001) "Mass Higher Education", in Anderson, P. and Williams, J. (eds) *Identity and Difference in Higher Education: Outsiders within,* pp. 28-37, Ashgate Publishing, UK.

MORRIS, C. (1996) *Quantitative Approaches in Business Studies,* Fourth Edition, Financial Times Pitman Publishing, Kent, UK.

MORRIS, D. S. AND HAIGH, R. H. (1996) "Overcoming the barriers to TQM", in Kanji, G. K. (ed) *TQM in Action*, Chapman and Hall, UK.

MULLINS, L. J. (1999) *Management and Organisational Behaviour,* Fifth Edition, Financial Times Pitman Publishing, London, UK

MULLINS, L. J. (2002) *Management and Organisational Behaviour,* Sixth Edition, Financial Times Pitman Publishing, London, UK

MULLINS, L. J. (2003) *Management and Organisational Behaviour,* Seventh Edition, Financial Times Pitman Publishing, London, UK

MUNCHI, K. F. (1992) "Averting a Reversal of TQM", Transactions of ASQC Quality Congress, Nashville, USA.

MURPHY, W. D. (2002) Personal communications, Research Supervisor, PhD Programme, Derbyshire Business School, University of Derby, United Kingdom, May.

NARASIMHAM, K. (1997) "Organizational climate at the University of Braunton in 1996", *Total Quality Management,* 8.

NEELY, A. (1998) *Measuring Business Performance: why, what and How?* The Economist Books.

NELSON, R. R. (1991) "Survey of Knowledge and Skill Requirements", *MIS Quarterly,* 15, pp. 503-521.

NICHOLLS, J. (1988) 'The Transforming Autocrat', *Management Today*, March, pp. 114-118.

NOVAK, J. M. (2002) *Inviting Educational Leadership: Fulfilling potential & applying an ethical perspective to the educational process*, School Leadership & Management Series, Pearson Education, London.

O'DELL, J. AND GRAYSON, A. (1997) "Identifying and transferring internal best practices", *Best Practice White Paper,* American Productivity and Quality Centre, APQC, Houston, Texas, USA.

OAKLAND, J. S. (1989) *Total Quality Management*, Heineman, London, UK

OAKLAND, J. S. (1993) Total Quality Management: the Route to Improving Performance, Second Edition; Butterworth-Heineman, Oxford, UK

OAKLAND, J. S. (1996) Total Quality Management, Butterworth-Heineman, Oxford.

OAKLAND, J. S. (2000) Total Quality Management, Butterworth-Heinemann, London, UK

OAKLAND, J. S. (2002) *Total Organisational Excellence*, Butterworth-Heineman, Oxford, UK

OAKLAND, J. S. (2003) *Total Quality Management: Text with Cases,* Butterworth-Heineman, Oxford, UK

OAKLANDS, J. S. (1999) *Total Organisational Excellence*, Butterworth-Heineman, Oxford.

OECD (1988) *New Technologies in the 1990s: A socio-economic strategy*, Organization of Economic Co-operation and Development, OECD, Paris,

OECD (1998) *STI: University Research in transition,* Organisation of Economic Co-operation and Development, OECD, Paris.

OLIVER, R. AND HERRINGTON, J. (2001) *Teaching and Learning On-line: A Beginners Guide to E-Learning and E-Teaching in Higher Education,* Perth, Centre for Research in Information Technology and Communications, Edith Cowan University, WA.

OSSEO-ASARE JR., A. E. (2000) "TQM AT THE UNIVERSITY OF DERBY: *Can a Sustainable Strategic Implementation and Control Programme be Achieved?* Unpublished Masters Dissertation, Derbyshire Business School, University of Derby, UK, September.

OSSEO-ASARE JR., A. E. (2003) *Sustaining Quality Improvement in UK Higher Education Institutions through Effective Management of Best Practices*, 2n Draft of Unpublished Doctoral Thesis, Derbyshire Business School, University of Derby, UK, September.

OSSEO-ASARE JR., A. E. (2004) *Sustaining Quality Improvement in UK Higher Education Institutions through Effective Management of Best Practices*, Unpublished Doctoral Thesis, Derbyshire Business School, University of Derby, UK, September.

OSSEO-ASARE JR., A. E. AND LONGBOTTOM, D. (2001) "Is the EFQM Model Suitable for Quality Management in UK Higher Education Institutions?" in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 & TQM: Integrated Management,* pp. 589-596, 17-17 April, Ayr, Ayrshire, Scotland, UK.

OSSEO-ASARE JR., A. E. AND LONGBOTTOM, D. (2002) "The Need for Education and Training in the use of the EFQM Model for quality management in UK Higher Education Institutions", *Quality Assurance in Education*, Vol. 10, Issue, 1, pp. 25-35, MCB University Press, Bradford, UK, *www.emeraldinsight.com*

OWLIA, M. S. (1995) *A Customer-Oriented Approach to the Measurement and Improvement of Quality in Engineering Education,* PhD Dissertation, University of Birmingham, UK.

OXFORD (2003a) Teaching and Learning, Institute for the Advancement of University Learning, University of Oxford, www.learning.ox.ac.uk

OXFORD (2003b) Research, Scholarship, Innovation at Oxford, University of Oxford, www.ox.ac.uk/research/

PALFREMAN, D. (2001) "The Ancient Collegiate Universities: Oxford and Cambridge", in Warner, D. and Palfreyman, D. (eds) *The State of UK Higher Education: Managing Change and Diversity,* Society for Research into Higher Education and Open University Press, pp. 9-28, Buckingham, UK.

PARASURMAN, A., ZEITHAML, V. AND BARRY, L. (1985) "A conceptual model of service quality and its implications for future research", *Journal of Marketing,* 49 (fall): 41-50.

PARKER, P. (1994) "The Shape of Leaders to Come", *Management Today*, July, pp. 5.

PERRY, R. AND SMART, J. C. (1997) *Effective Teaching in Higher Education, Agathon Press,* New York

PERRY, W. G. (1988) "Different worlds in the same classroom", in Ramsden, P. (ed) *Improving Learning: New Perspectives,* Kogan Page, London.

PETERS, T. AND WATERMAN, R. H. (1982) *In Search of Excellence: Lessons from America's Best-Run Companies,* Harper & Row Publishers Inc., USA.

PETERS, T. AND WATERMAN, R. H. (1992) *In Search of Excellence: Lessons from America's Best-Run Companies,* Reprinted, Harper & Row Publishers Inc., USA.

PFEFFER, J. (1994) *Competitive Advantage Through People,* Free Press, New York

PFEFFER, N. AND COOTE, A. (1991) "Is Quality good for you?", *Social Policy Paper, No. 5,* London Institute for Public Policy Research.

PINTO, J. K. AND SLEVIN, D. P. (1989) " Critical Success Factors in R- and-D Projects", *Research-Technology Management,* 32, pp. 31-35.

PLUNKETT, J. J. AND DALE, B. S. (1987) "A Review of the Literature in Quality-Related Costs", *The International Journal of Quality and Reliability Management,* Vol. 4, No. 1.

POLAND, B. D. (2002) "Transcription Quality", in Gubrium, J. F. and Holstein, J. A. (eds) *Handbook of Interview Research: Context and Methods,* SAGE Publications, London.

POLLITT, C. (1990) "Doing Business in the Temple? Managers and Quality Assurance in the Public Service", *Public Administration, 68, pp. 435-452*

POOL, I. DE S. (1959) *Trends in content analysis,* University of Illinois Press, Urbana.

PORTER, M. E. (1998) *Competitive Strategy: Techniques for Analyzing Industries and Competitors,* The Free Press, New York.

POWELL, T. C. (1995) "Total quality management as competitive advantage: a review and empirical study", *Strategic Management Journal,* 16(10, pp. 15-37

PRING, R. (1992) Academic Respectability and Professional Relevance: An Inaugural Lecture delivered before the University of Oxford, Clarendon Press.

PROSSER, M. AND TRIGWELL, K. (1998) *Teaching for Learning in Higher Education,* Open University Press, Buckingham, UK.

PSACHAROUPOULOS, G. (1987) *Economics of Education: Research and Studies,* Pergamon, Oxford, UK.

PUPIUS, M. AND BRUSONI, M. (2000) "Comparing and contrasting the EFQM Excellence Model and the EQUIS Accreditation Process for Management in Higher Education, Proceedings of International Conference on Quality in Higher Education in the New Millennium, pp. 16-37, University of Derby, UK, 24/25 August.

QAA (2000) *Handbook for Academic Review,* www.qaa.ac.uk

QAA (2001) The Quality Assurance Agency for Higher: an introduction, Promoting higher quality, Gloucester, UK, www.qaa.ac.uk

QAA (2002a) *Handbook for Institutional Audit: England,* Quality Assurance Agency for Higher Education, Gloucester, UK, www.qaa.ac.uk

QAA (2002b) Annual Report and Financial Summary, 2000/2001, Quality Assurance Agency for Higher Education, Gloucester, UK, www.qaa.ac.uk

QAA (2003a) *Strategic Plan: 2003-05,* Quality Assurance Agency, pp. 1-20, Gloucester, UK, January, www.qaa.ac.uk

QAA (2003b) *Strategic Plan: 2003-05,* Quality Assurance Agency, pp. 21-34, Gloucester, UK, December, www.qaa.ac.uk

RASMUSSEN, P. (1997) "A Danish approach to quality in higher education: the case of Aalborg University", in Brennan, J., de Vries, P. and Williams, R. (eds) *Standards and Quality in Higher Education,* Jessica Kingsley, London, UK.

REA, D. M. (1989) "Strategy in Public Sector Organisations", in Jones, P. (ed) *Management in Service Industries,* Pitman Publishing.

REAVILL, L.R.P. (1998) "Quality assessment, total quality management and the stakeholders in the UK higher education system", *MCB Managing Service Quality*, Volume 8, Number 1, pp. 55-63, MCB University Press www.emerald-library.com

REED, D. A. (1996) "Is the Business Excellence Model Applicable in the UK Public Sector?" in Kanji, G. K. (ed) *Total Quality Management,* Chapman & Hall, London.

REMENYI, D., WILLIAMS, B., MONEY, A. AND SWARTZ, E. (1998) *Doing Research in Business and Management: An introduction to process and method,* SAGE Publications, London.

REMENYI, D., WILLIAMS, B., MONEY, A. AND SWARTZ, E. (2002) *Doing Research in Business and Management: An introduction to process and method,* SAGE Publications, London.

REMENYI, D., WILLIAMS, B., MONEY, A. AND SWARTZ, E. (2003) *Doing Research in Business and Management: An introduction to process and method,* SAGE Publications, London.

RICHARDSON, B. AND THOMPSON, J. (1994) "Strategic Competency in the 1990's", *Administrator,* pp. 2-6, July

ROBBINS, L. (1963) *Higher Education: Report of the Committee appointed by the Prime Minister under the chairmanship of Lord Robbins: 1961-63,* Cmnd 2154, HMSO, London, UK

ROCKART, J. F. (1982) "The changing role of the information systems executive: a critical success factors perspective, *Sloan Management Review*, 24(1), pp. 3-13, Fall.

ROMIZOWSKI, A. J. (1981) *Designing Instrumental Systems,* Kogan Page, London, UK.
ROSSMAN, G. B. AND WILSON, B. L. (1991) "Numbers and Words revisited: Being shamelessly eclectric", *Evaluation Review*, Vol. 9 (5).

ROWLEY, J. (1996) "Measuring quality in Higher Education, Quality in Higher Education, Vol.2, No.3.

RUSHTON, J. (2001) "Managing Transformation", in Warner, D. and Palfreyman, D. (eds) *The State of UK Higher Education: Managing Change and Diversity,* The Society for Research into Higher Education and Open University Press, pp. 170-177, Buckingham, UK.

RYAN, G. W. AND BERNARD, H. R. (2000) " Data Management and Analysis Methods", in Denzin, N. K. and Lincoln, Y. S. (eds) *Handbook of Qualitative Research,* Second Edition, SAGE Publications, London.

SALLIS, E. (1996) *Total Quality Management in Education*, Kogan Page, London, UK.

SALTER, B. AND TAPPER, T. (1994) *The State and Higher Education,* The Woburn Press, Essex, UK.

SANDERS, C. (2003) "Oxford inequalities exposed", The Times Higher Education Supplement, THES, pp. 4, May 2, London, UK.

SARAPH, J. V., SCHROEDER, R. G. AND BENSON, P. G. (1989) "An instrument for measuring critical success factors of quality management", *Decision Sciences,* 20, pp. 810-929.

SAUNDERS, M., LEWIS, P. AND THONHILL, A. (2000) *Research Methods for Business Students,* Second Edition, Financial Times Prentice Hall, London.

SAUNDERS, M., LEWIS, P. AND THORNHILL, A. (2003) *Research Methods for Business Students,* Third Edition, Financial Times Prentice Hall, London, UK.

SCARDAMALIA, M., BEREITER, C. AND LAMON, M. (1994) "Trying to bring the classroom into World 3", in McGilley, K. (ed) Classroom Lessons: Integrating Cognitive Theory and Classroom Practice, CSILE Project, pp. 201-228, MIT Press, Cambridge, MA, USA.

SCHAFFERS, R. H. AND THOMSON, H. A. (1992) "Successful Change Programs Begin with Results", *Harvard Business Review,* pp. 80-89, January-February.

SCHATZMAN, L. AND STRAUSS, A. L. (1973) *Field Research: Strategies for a Natural Sociology,* Englewood Cliffs, Prentice-Hall, NJ.

SCHNEIER, C. E., SHAW, D. G. AND BEATTY, R. W. (1992) "Performance Measurement and Management: a tool for strategy execution", *Human Resource Management,* 30, pp. 279-301.

SCHON, D. A. (1983) *The Reflective Practitioner: How Professionals Think in Action,* Temple Smith, London, UK.

SCOTT, P. (1995) *The Meaning of Mass Higher Education,* Society for Research into Higher Education and Open University Press, Bury St Edmunds, UK.

SCOTT, P. (2001) "Triumph and Retreat", in Warner, D. and Palfreyman, D. (eds) *The State of UK Higher Education: Managing Change and Diversity,* The Society for Research into Higher Education & Open University Press, pp. 187-204, Buckingham, UK.

SEDDON, J. (1989) "A passion for quality", *The TQM Magazine,* pp. 153-157, May

SEIDEL, J. AND KELLE, U. (1995) "Different functions of coding in the analysis of textual data", in Kelle, U. (ed) *Computer-aided qualitative data analysis: Theory, methods and practice,* SAGE Publications, pp. 52-61, London.

SENGE, P. M. (1990a) *The Fifth Discipline: The Art and Practice of the Learning Organisation,* Doubleday

SENGE, P. M. (1990b) "The Leader's New Work: Building Learning Organizations", *Sloan Management Review, pp. 7-23,* Fall.

SEYMOUR, D. T. (1992) On Q. Causing Quality in Higher Education, New York, MacMillan.

SEYMOUR, D. T. AND ASSOCIATES (1996) High Performing Colleges: The Malcolm Baldrige National Quality Award as a framework for Higher Education, Prescott Publishing, USA.

SHAKOR, M. (1994) *Total quality management within the context of higher education: an evaluation of the extent to which the concept of TQM is applicable in higher education*, M.Sc. Thesis, Liverpool University, UK.

SHEFFIELD HALLAM (2003a) Our Campuses, Sheffield Hallam University, December, www.shu.ac.uk/university/location

SHEFFIELD HALLAM (2003b) Teaching and Learning Quality, Sheffield Hallam University, December, www.shu.ac.uk/

SHERGOLD, K. AND REED, D.M. (1996) "Striving for excellence: how self-assessment using the Business Excellence model can result in step improvements in all areas of business activities", *The TQM Magazine,* Vol.8, No.6, MCB University Press, www.emerald-library.com

SHIELDS, P. (2000) "Quality Management – the role in the new economy", *Quality Today*, July.

SHUELL, T. J. (1986) "Cognitive Conceptions of Learning", *Review of Educational Research,* 56, pp. 411-436

SHUELL, T. J. (1998) "Cognitive Conceptions of Learning", *Review of Educational Research,* 56, pp. 411-436.

SIMON, H. A. (1964) "On the Concept of Organisational Goal", *Administrative Science Quarterly,* Vol. 10, pp. 21, June

SLACK, N. (1991) *The Manufacturing Advantage,* Mercury Business Books.

SLACK, N., CHAMBERS, S., HARLAND, C., HARRISON, A., JOHNSTON, R. (1998) *Operations Management*, Second Edition, Pitman Publishing.

SMITH, S. (1994) *The Quality Revolution: Best Practice from the World's Leading companies*, Management Books, Oxon.

SPANBAUER, S. J. (1989) *Measuring and Costing Quality in Education,* Fox Valley Technical College Foundation, Appleton, Wisconsin.

SPRADLEY, J. P. (1979) *The Ethnographic Interview,* Holt, Rinchart & Winston, New York.

SRIKANTHAN, G. (2001) "Developing a Model for Quality in Higher Education", *Proceedings of the Fifth International Research Conference on Quality Management,* Melbourne, Australia

SRIKANTHAN, G. AND DALRYMPLE, J. (2001) "A Fresh Approach to a Model for Quality in Higher Education", in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 & TQM: Integrated Management,* pp. 566-572, 17-19 April, Ayr, Ayrshire, Scotland, UK.

STEFFE, l. AND GALE, J. (1995) *Constructivism in Education,* Hillsdale, Lawrence Erlbaum, NJ

STERLING, M. (2003) "In the News", *Times Higher Education Supplement*, THES, May 30, London, UK.

STOGDILL, R. M. (1974) *Handbook of Leadership*, Free Press.

STOREY, J. (1992) *Developments in the Management of Human Resources: An Analytical Review,* Blackwell.

STRALSER, S. (1995) "Benchmarking: the new tool", Planning for Higher Education, 23.

STRAUSS, A. AND CORBIN, J. (1990) *Basics of Qualitative Research: Grounded Theory Procedures and Techniques,* Newbury Park, SAGE Publications CA.

STRAUSS, A. AND CORBIN, J. (1998) *Basics of Qualitative Research,* Second Edition, Thousand Oaks, SAGE Publications, CA

TAFFINDER, P. (1995) *The New Leaders: Achieving Corporate Transformation Through Dynamic Leadership*, Kogan Page.

TAGUCHI, G. (1986) *Introduction to Quality Engineering: Designing Quality into Products and Processes,* Asian Productivity Organisation, Tokyo.

TAPPER, T. AND PALFREYMAN, D. (2000) O*xford and the Decline of the Collegiate Tradition,* Woburn Press, London.

TASHAKKORI, A. AND TEDDLE, C. (1998) *Mixed Methodology: Combining Qualitative and Quantitative Approaches,* Applied Social Research Methods Series, Volume 46, SAGE, London.

TAYLOR, A. (1997) "Education for Industrial 'Postindustrial' purposes", *Educational policy,* 11, 1, pp. 3-40

TAYLOR, F. W. (1947) *Scientific Management,* Harper and Row

THES (1998a) "Quality Assurance: a new approach", *Times Higher Education Supplement*, UK, 16 October.

THES (1998b) "What universities think", *Times Higher Education Supplement*, UK, June 26.

THES (2002a) "The Big Picture: charting the Changes facing UK Higher Education", *The Times Higher Education Supplement*, THES, pp. 26-27, September 20, London, UK.

THES (2002b) "Unfair Systems doesn't reward Teaching", *The Times Higher Education Supplement*, THES, pp. 8, September 13

THES (2003a) "Why I think the white paper's focus on performance is fine", *The Times Higher Education Supplement*, THES, pp. 14, June 6, London, UK.

THES (2003b) "Teaching - focused 'not worthy' of university title", *The Times Higher Education Supplement*, THES, pp. 2, June 6, London, UK.

THES (2003c) "RAE Reform to shut out one in three", *The Times Higher Education Supplement*, THES, pp. 1-2, May 30, London, UK.

THES (2003c) "If UK insists on hiding it could end in 'nul points'", *The Times Higher Education Supplement*, THES, pp. 12, May 30, London, UK.

THES (2003d) "£5.5bn buys single-track universities", *The Times Higher Education Supplement*, THES, pp. 1-16, March 7, London, UK.

THES (2003d) "English Funding Allocations 2003-04", *The Times Higher Education Supplement*, THES, pp. 6, 7, March 7, London, UK.

THES (2003e) "Demand to explode but no new cash", *The Times Higher Education Supplement*, THES, pp. 1, 6, June 20, London, UK.

THES (2003f) "Colleges furious at UUK title stand", *The Times Higher Education Supplement*, THES, pp. 6, February 28, London, UK.

THES (2003g) "Postal Vote forced on Top-up Fees", *The Times Higher Education Supplement*, THES, pp. 4, May 2, London, UK.

THES (2003h) "Don't be Jack of all trades, become the master of one: capitalise on strengths and collaborate with others if you want more cash", *The Times Higher Education Supplement*, THES, pp. 6-7, March 14, London, UK.

THES (2003i) "HIGHER JOBS", *The Times Higher Education Supplement*, THES, pp. 32-59, April 4, London, UK.

THIAGARAJAN, T. (1995) *An Empirical Study of Total Quality Management (TQM) in Malaysia: A Proposed Framework of Generic Application,* PhD Dissertation, University of Bradford, UK.

THOMPSON, J. L. (2003) *Strategic Management,* Fourth Edition, Thomson, London, UK

THOMSON, D. (1999) "A System Approach to TQM", Manufacturing Engineers, Vol. 78, No. 3, pp. 104-106, June.

THORNETT, T. and VIGGIANI, R. (1996) "Quality in education: creating a learning society: Pen y Dre experience", *The TQM Magazine*, Vol.8, Issue 4, pp. 29-35, MCB University Press, Bradford, UK, www.emerald-library.com

TILLS, S. (1969) "Making Strategy Explicit", in Ansoff, H. I. (ed) *Business Strategy,* Penguin.

TOFTE, B. (1995) "A theoretical model for implementation of total quality leadership in education", *Total Quality Management,* Vol. 6, Nos. 5 & 6, pp. 469-478

TORRINGTON, D. (1988) How does Human Resource Management change personnel function?, *Personnel Review*, 17, 6

TRANSFIELD, D. AND STARKEY, K. (1998) "The nature, social organisation and promotion of management research: towards policy", *British Journal of Management,* 9, pp. 341-353

TRIGWELL, K. AND PROSSER, M. (1997) Towards an understanding of individual acts of teaching and learning, *Higher Education Research and Development,* 16, pp.241-252

TROW, M. (1994) *Managerialism and the Academic Profession: Quality and Control.* Open University Quality Support Centre, London.

TYSOME, T. (1998) "Quality: how it all fits together", The Times Higher Education Supplement, 5 June.

UCAS (2000) "Students", Universities and Colleges Admissions Services, UCAS, December, www.ucas.ac.uk

UK BUDGET (2003*) Delivering High Quality Public Services, Building A Britain of Economic Strength,* Chapter Six, Budget Report, April, *www.hm-treasury.gov.uk/budget*

UNITED STATES GENERAL ACCOUNTING OFFICE (1991) *Management Practices: US Companies Improve Performance through Quality Efforts,* USGAO, GAO/NSIAD-91-190, Washington, DC.

UNIVERSITY OF LONDON (2003) Undergraduate and Post-graduate Programmes, *www.lon.ac.uk*

UNIVERSITY OF MANCHESTER (2003) Undergraduate Programmes, *www.man.ac.uk*

UUK (2002a) *Culture of Enterprise: knowledge transfer across the nation*, Universities UK, May, *www.universitiesuk.ac.uk/bookshop/*

UUK (2002b) Universities UK, UUK, *www.universitiesuk.ac.uk/bookshop/*

UUK (2003) *Partners in Care: Universities and the NHS*, Universities UK, UK, March, www.universiitesuk.ac.uk/bookshop/

VAN VUGHT, F. AND WESTERHEIJDEN, D. F. (1993) *Quality Management and Quality Assurance in European Higher Education: Methods and Mechanisms,* Office of the Official Publications of the European Commission.

VAZZANA, G., BACHMANN, D. AND ELFRINK, J. (1997) "Does higher education practice what is teaches?" *Quality Progress,* Volume 30, pp. 67-70.

VOSS, C.AND O'BRIEN, R. C. (1992) *In Search of Quality*, London Business School, London.

VROOM, V. H. AND YETTON, P. W. (1973) *Leadership and Decision-Making*, University of Pittsburgh Press, Pittsburgh

WALDMAN, D. (1994) "The contributions of total quality management to a theory of work performance", *Academy of Management Review,* 19(3), pp. 511-536

WAN, T. B. AND CHOW, C. F. P. (2000) "The Quality Model for Singapore Schools", in Ho, S. K. M. and Leong, C. C. (eds) *Proceedings of the Fifth International Conference on ISO 9000 & TQM: Action 2000 – Imperative for Improvement, Part 10: Business Excellence in Education*, pp. 499-506, Singapore, 25/27 April.

WARNER, D. AND CROSTHWAITE, E. (1995) *Human Resource Management in Higher and Further Education,* Society for Research into Higher Education & Open University Press, Buckingham, UK.

WARNER, D. AND PALFREYMAN, D. (1996) *Higher Education Management,* Society for Research into Higher Education and Open University Press, pp. 1-6, Buckingham, UK.

WARNER, D. AND PALFREYMAN, D. (2001) *The State of UK Higher Education: Managing Change and Diversity,* Society for Research into Higher Education and Open University Press, pp. 1-6, Buckingham, UK.

WARREN, R. (1994) "The collegiate ideal and the organisation of the new universities", *Reflections on Higher Education,* 6, pp. 34-55.

WATSON, D. (1999) "Decoding Dearing on Diversity", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 325-343, Jessica Kingsley Publishers, London.

WATSON, D. (2000) *Managing Strategy,* Open University Press. Buckingham, UK.

WATSON, D. AND BOWDEN, R. (2002) *The new university decade: 1992-2002,* Education Research Centre, University of Brighton, UK

WEBSTER (2002) *Dictionary and Thessaurus,* Concise Edition, Geddes and Grosset, Scotland, UK.

WEEKS, P. (2000) "Benchmarking in Higher Education: An Australian case Study", Innovations in Education and training International, IETI 37, 1, Routledge.

WEIR, D. (1993) "Not doing the business", Times Higher Education Supplement, April 30.

WELLS, P. (1994) "Ethics in business and management research", in Wass, V. J. and Wells, P. E. (eds), *Principles and Practice in Business and Management Research,* Aldershot, Dartmouth, pp. 2-34.

WHITTINGTON, R. (1993) What is Strategy – and does it matter? Routledge.

WILKINSON, A., REDMAN, T., SNAPE, E. AND MARCHINGTON, M. (1998) *Managing Through TQM: Theory and Practice,* Macmillan, London, UK

WILLIAMS, A., DODSON, P. AND WALTERS, M. (1991) *Changing Culture,* Institute of Personnel Management, IPM, London, UK

WILLIAMS, B. (1991) *University Responses to Research Selectivity*, Centre for Higher Education Studies, London Institute of Education, London. UK.

WILLIAMS, G. L. (1995) "The marketization of higher education: reforms and potential reforms in higher education finance", in Dill, D. D. and Sporn, B. (eds) *Emerging Patterns of Social Demand and University Reform: through a Glass Darkly,* IAU Press & Pergamon, Trowbridge.

WILLIAMS, G. L. (1996) "The many faces of privatisation", *Higher Education Management,* 8, 3.

WILLIAMS, G. L. (1997) "The market route to mass higher education: British experience 1979-1996", *Higher Education Policy,* Vol. 10, No. 3 & 4.

WILLIAMS, G. L. (1999) "State Finance of Higher Education: An Overview of Theoretical and Empirical Issues", in Henkel, M. and Little, B. (eds) *Changing Relationships Between Higher Education and the State,* Higher Education Policy Series 45, pp. 142-161, Jessica Kingsley Publishers, London.

WILLIAMS, J. AND ABSON, J. (2001) "Mass Higher Education: The Construction of Difference", in Anderson, J. and William, J. (eds) *Identity and Difference in Higher Education: Outsiders within,* pp. 11-27, Ashgate Publishing, UK.

WILLMS, D. G., BEST, J. A., TAYLOR, D. W., GILBERT, J. R., WILSON, D. M. C., LINDSAY, E. A. AND SINGER, J. (1990) "A systematic approach for using qualitative methods in primary prevention research", *Medical Anthropology Quarterly,* 4, pp. 391-409.

WILSON, R. A. GREEN, A. E. (2001) *Projections of Occupations and Qualifications: 2000/2001: Research in Support of the National Skills Taskforce,* Department for Education and Employment, DfEE, Sheffield, UK.

WITMET, D. E., COLEMAN, R. W. AND KATZMAN, S. L. (1999) "From paper and pen to screen and keyboard: towards a methodology for survey research on the Internet", in Jones, S., *Doing Internet Research*, Thousand Oaks, CA, SAGE, pp. 145-162.

WOLCOT, H. F. (1994) *Transforming Qualitative Data: description, analysis and interpretation,* SAGE Publications, London.

WOLCOT, H. F. (2001) *Transforming Qualitative Data: description, analysis and interpretation,* SAGE Publications, London.

WOODLEY, C. (2001) "Activity focused: a constructivist approach to online curriculum", Paper given to the Learning Matters Symposium 2001, Victoria University, Melbourne, Australia, 6-7 December.

WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (2002) *Sustainability through the market: seven keys to success, WBCSD,* Switzerland, January, www.wbcsd.org

WORTHINGTON, I. AND BRITTON, C. (1997) *The Business Environment,* Second Edition, Pitman Publishing, London, UK

WORTHINGTON, I. AND BRITTON, C. (2003) *The Business Environment,* Third Edition, Pitman Publishing, London, UK

YU, E. S. W., CHAN, O. K. C., WONG, K. Y., SIU, V. Y. F. AND CHEUNG, A. C. (2000) "Total Quality Strategy of Service Departments in Higher Education Institutions", in Ho, S. K. M. and Leong, C. C. (eds) *Proceedings of the Fifth International Conference on ISO 9000 & TQM: Action 2000 – Imperatives for Improvement,* pp. 517-523, 25/27 April, Singapore.

YUKL, G. (1994) *Leadership in Organizations*, Third Edition, Prentice-Hall International, London.

YUKL, G. (2002) *Leadership in Organizations*, Fifth Edition, Prentice-Hall International, London.

ZACKS, D. AND WISER, M. (1999) "Quality management at the University of Derby Extension in Israel: the use of student questionnaires as a tool for improving the quality of teaching and learning", No 9, Lugio 2000, SINERGIE, CUEIM.

ZADELHOFF, C. J., DE WET, A. G., POTHAS, A. AND PRETORIUS, P. D. (1995) *Total Quality Management,* Vol. 6, Nos. 5 & 6, pp. 539-546.

ZAIRI, M. (1994a) *Performance Measurement for Business Results,* Chapman and Hall, London, UK.

ZAIRI, M. (1994b) " Leadership in TQM Implementation: Some Case examples", *The TQM Magazine,* Vol. 6, No. 6, MCB University Press, pp. 6-16.

ZAIRI, M. (1997) "Business Process Management: a boundaryless approach to modern competitiveness", *Business Process Management,* 3(1), pp. 674-680.

ZAIRI, M. (2000a) "Managing Customer dissatisfaction through effective complaints management systems", *The TQM Magazine,* Volume 12, Number 5, pp. 331-335, MCB University Press, www.emerald-library.com

ZAIRI, M. (2000b) "Social responsibility and impact on society", *The TQM Magazine,* Volume 12, Number 3, pp. 172-178, MCB University Press, www.emerald-library.com

ZAIRI, M. AND PETERS, J. (2001) "The impact of Social Responsibility on Business Performance", in Ho, S. K. M. and Donnelly, M. (eds) *Proceedings of the Sixth International Conference on ISO 9000 and TQM: Integrated Management,* pp. 123-129, 17-19 April, Ayr, Ayrshire, Scotland, UK.

ZEITHAML, V. A. BERRY, L. L. AND PARASURAMAN, A. (1988) Communication and control processes in the delivery of service quality, *Journal of Marketing,* 52, pp. 35-48, April.

ZINK, K. J. AND VOSS, W. (1999) "The new EFQM Excellence Model and its impact on higher education institutions", No. 9, Luglio 2000, SINERGIE, CUEIM.

Bibliographical Notes

CHAPTER ONE:

1. **United Kingdom** comprises of England, Scotland, Wales and Northern Ireland (DfES, 2003:1). Even though the higher education institutions (HEIs), which participated in this doctoral research study, were all from England, the research findings have serious implications for HEIs in Scotland, Wales and Northern Ireland. This is partly because the sample under study comprises of pre-1992 and post-1992 institutions. Scott (1995) categorised UK HEIs into seven groups comprising: (1) Oxbridge, (2) London, (3) Civics, (4) Redbricks, (5) Plateglass, (6) Technology, and (7) new institutions of 1992. The first six groups comprise of pre-1992 or 'old' universities and the last group comprises of post-1992 or 'modern' universities, majority of whom were former polytechnics.

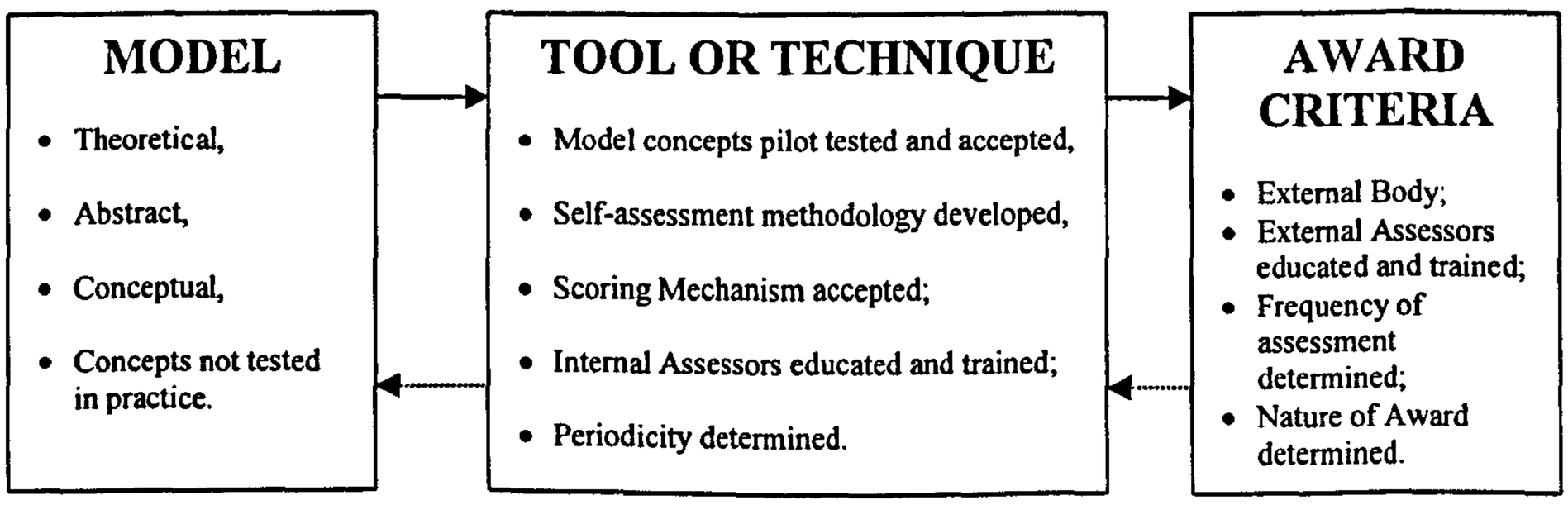
2. **Academic Areas** as referred to in this thesis comprise of Teaching, Learning, Scholarship, and Research functions or activities. Many academics and practitioners narrowly define Academic Excellence in terms of 'Teaching and Research' excluding Learning and Scholarship (Biggs, 2003; Bushaway, 2003; DfES, 2003:23, 46). This doctoral research thesis recommends a holistic definition comprising of all four areas in an integrated manner.

3. **The UK Labour Government Secretary of State for Education and Skills** – Charles Clarke - presented the Government White Paper on Higher Education Policy titled: *The Future of Higher Education* to Parliament in January 2003. The central theme was 'increased investment in higher education in order to maintain national and international excellence through competitiveness'.

4. **Criticality** used in this doctoral thesis refers to 'the measure of the extent to which an internal, external or competitive environmental factor is judged to be very important and very effective in the achievement of institutional performance results. It is considered that the extent to which a factor is deemed to be 'critical' changes overtime and needs to be monitored on regular basis to determine their relative ranking and contribution to performance improvement. The term relates to the notion of 'Critical Success Factors (CSFs) defined by Boynton and Zmud (1984) as those few things that must go well to ensure individual and organisational performance success.

5. **Tools and Techniques** in quality management terminology refer to performance measurement devices, which are a part of the 'hard' elements of TQM (Dale, 1999). There is a clear distinction between **'models', 'tools and techniques'**, and **'award criteria'** in this research thesis. The term 'model' is defined in this thesis as a conceptual representation of the reality pertaining within UK higher education institutions. This reality is assessed by finding out how individual quality managers perceive a quality management practice in terms of its relative efficiency and effectiveness in delivering real improvement in the quality of teaching and research. The 'model' developed in this thesis fits this definition because it is essentially conceptual and needs to be pilot tested before full implementation - this will be at the post-doctoral level. Following successful testing of the 'model' a 'autonomy' and 'accountability' criteria together with the scoring mechanism will be used to transform the model into quality assessment 'tool and technique'. For instance, institutional or departmental performance could be self-assessed against each criterion to determine if quality management practices are 'weak', 'good', 'best' or 'excellent' depending on the number of points scored out of say a total of 1000 points. Where an external funding body wants to award institutions for their efforts towards academic excellence, the 'model' as a self-assessment 'tool or technique' could then become the basis for awarding excellence in teaching and research - by so doing the model becomes an 'award criteria' (see Figure B1 below).

Figure B1
The Transition from a Model to an Award Criteria
Source: Osseo-Asare Jr., 2003



APPENDIX: A1

A Detail Description of the Nature of the Problems Associated with the 'Nine' Research Gaps
Source: Osseo-Asare Jr. 2003

Problem #1: The Problem of How to Effectively Identify and Measure Critical Success Factors in Higher Education Institutions

The literature suggests there is a significant perception 'gap' in the theory and practice of the concept of critical success factors (CSFs), in the higher education environment. First, this 'gap' seems to have been created as a result of a lack of appropriate definition of 'critical success factors' that is applicable to higher education. It represents another example of industry and commerce forcing its own terminology on public sector higher education sectors, and arrogantly assuming academics understand 'criticality' and 'success' when used together. Following from the pioneering work of Daniel (1961), other researchers including Kanji and Tambi (2002), have worked hard to introduce the concept to UK higher education – albeit with some difficulty. Academics and administrators accept the fact that, there are many diverse factors operating inside and outside higher education institutions (HEIs), some of which are generic to the higher education sector, whilst others are specific to individual higher education individual institutions. It raises the question about the viability of introducing a measurement instrument based on predetermined set of criteria for determining the 'criticality' of these factors and linking them with performance measures and indicators.

Problem #2: The Problem of How to Successfully Implement strategies for diversifying sources of funding

Existing literature identify the private and public sectors as the two main sources of funding for UK higher education. Whereas public sector funding for public sector higher education institutions is expected, there is still controversy over the extent to which private sector funding should be permitted, and how far institutions should be allowed to enter into commercial ventures. The Government has the political power to finance public higher education institutions; students as consumers and customers are also expected to directly or indirectly pay for the services provided, but the contribution from potential employers and the community in which institutions operate in is still not clear. This raises questions about the extent to which a mutually beneficial strategic relationship can be developed and sustained to maintain continuous inflow of funds for achieving academic excellence (Clarke, 2003:3). The literature also identified international funding bodies as possible source of funding.

Problem #3: The Problem of How to Sustain A Continuous Inflow of Financial Resources for Increased Investment in Infrastructure

The literature suggests that, there is a significant efficiency 'gap' in the way in which individual higher education institutions combine their financial and non-financial resources, in order to secure their sovereignty and autonomy. Studies by Williams (1991), Becher and Kogan (1992), Barnes (1999) and McNay (1999), conclude that, without regular independent inflow of financial resources a publicly funded higher education institution has no way of exercising sovereignty; and unless the financial inflow is substantial, its autonomy will be severely compromised. This raises a fundamental question about the effectiveness of institutional financial management, in terms of their ability to acquire and efficiently allocate funds to various departments, using 'quality' as a policy instrument, for selective allocation of funds for teaching and research activities. It also raises the question about the extent to which individual departments can help the whole institutions to achieve its key goals in the areas of: International Competitiveness; Regional Regeneration; Widening Participation and Lifelong Learning. These key goals are at the heart of the recent Government strategy for the future development of higher education in the United Kingdom (Department of Education and Skills, 2003).

Problem #4: The Problem of QAA and HEFCE Models overemphasising 'processes' at the expense of 'inputs' and 'outputs'

The literature suggests that, continuous improvement in core processes is necessary over a relatively long period of time, to provide the basis for the more short-term radical change and improvement, suggested by alternative philosophies of change; for instance, Business Process Re-engineering (BPR) or Mangement. Research by Kanji and Tambi (1999:144) and later by Osseo-Asare and Longbottom (2002:26-36) confirmed that 'processes' as a critical success factor is ranked by most UK higher institutions as being more important than 'leadership'. This according to TQM advocates including Kanji and Tambi (1999), is strategically wrong, because the most important factor in the successful implementation of TQM processes, is the 'total' commitment of top-leadership of an institution. It raises questions about the mix of processes necessary to achieve institutional academic objectives. Also whether or not there is a sustainable framework for ensuring continuous inflow of resources and measuring outputs from processes, and ensuring that, activities and tasks, making up each process are selected after careful evaluation on the basis of their contribution to achieving long-term institutional objectives. Even though advocates of TQM and TQM-driven Excellence models believe they are applicable in any organisation, critiques have expressed serious doubts as to their suitability in an increasingly complex higher education environment. This raises questions about the extent to which, the frameworks offered by the Quality Assurance Agency (QAA), the Higher Education Funding Councils (HEFCs), TQM and TQM-driven Excellence Models, constitute the building blocks for developing appropriate *alternative* holistic and integrated model for UK higher education institutions. Also whether or not such a model incorporates 'generic' and 'specific' factors, in order to maximise the benefits of synergy, which include efficient allocation and utilisation of scarce resources.

Problem #5: The Problem of How pre-1992 and post-1992 Institutions not being able to Share Good and Best Quality Management Practices in order to act Strategically to Sustain National and International Competitiveness and Excellence

The literature suggests that, the government, its departments and agencies – as the main stakeholder in higher education - have a greater ability to act strategically, to influence the strength of current competition within the Higher Education Industry, and in so doing determine the structure of the higher education market. Successive UK Governments have acted directly and indirectly to shape the structure of the UK Higher Education Market, in order to achieve their political, social and economic objectives. The existence of sub-groups within the pre-1992 and post-1992 categorisation of universities in the United Kingdom bares testimony to the fact that, higher education institutions are still very much interested in protecting their sovereignty and autonomy. This they do by acting collaboratively and in partnership with institutions with similar missions, in order to minimise the negative impact of direct government intervention on institutional sovereignty and academic freedom and autonomy.

Problem #6: The Problem of developing an acceptable Composite Definition of Quality, and Sustaining its Link with Excellence in a Higher Education Environment

The literature suggests that, the term *quality* is no longer a basic attribute of a product or service, but now a means to achieving *excellence* (Liston, 1999:11). The writings of Green (1994), and Brennan and Shah (2000), suggest that, the meaning of 'quality' in higher education is still an elusive term whose meaning is difficult to articulate; with very few agreeing on one universal definition or approach to quality. It raises the question about the extent to which a 'composite' definition and meaning of quality can be derived for use in higher education; and whether or not this composite definition will be acceptable in a higher education environment. Most national quality bodies in Europe including the UK have failed in their attempt to come up with a composite conception of quality that would achieve legitimacy with stakeholders in higher education. This failure has led to a situation where the most powerful stakeholder group decides on which definition and approach to apply in order to achieve their stated aims and objectives (Harvey and Green, 1993; Brennan and Shah, 2000:18).

Problem #7: The Problem of adopting a Reflective Teaching and Learning Model in order to Sustain Continuous Improvement in the Quality of Teaching and Learning

The theory of c*onstructivism* unlike *phenomonography*, focuses on students' learning activities, rather than teachers' teaching activities. Various studies suggest that, in order to improve the quality of teaching and learning, *constructivism* is more appropriate, because it provides a broad-based theoretical framework that is empirically sound, which helps teachers reflect on their teaching. Knowledge, according to *constructivists* is constructed by whether or not a student adopts a 'surface' and/or 'deep' approaches to learning. According to Biggs (2003:13), teachers should discourage *surface* learning, because, low cognitive level of engagement results in fragmented learning outcomes that do not convey the meaning as construed by the student; *deep* approach, however, should be encouraged, because it yields meaning as construed by the student. What students construct from a learning encounter depends on their motives and intentions, on what they know already, and on how they use their prior knowledge. Meaning is therefore personal, from a constructivist point of view; however, what is common is the alternative, where, meaning is transmitted from teacher to student, as suggested by *phenomenography-driven* teaching (Biggs, 2003:13). It raises questions about the extent to which the various models for assessing academic quality take the constructive approach into consideration. These models do not effectively couple teaching with learning; quality of inputs, with the quality of processes and of outputs.

Problem #8: The Problem of adopting a Reflective Research and Scholarship Model in order to Sustain Continuous Improvement in the Quality of Research and Scholarship

The literature on systems thinking, suggest that, an inputs-processes-outputs model for research quality management can be developed, based on identifiable inputs, processes and outputs. It also suggests that, improving the quality of research outcomes for a particular academic discipline raises fundamental questions about how core research processes are integrated, in an environment of scarce research resources. TQM and TQM-driven Excellence models unlike the HEFCE Research Excellence Model do not seem to relate well to the organisation of research at the departmental or school level. This has serious implications for the quality of inputs into research processes, the quality of research processes, and the quality of research outcomes in higher education institutions. The literature clearly suggests that, effective management of research at the department or unit level is essential for maintaining the management of research at the institutional or macro level. It also suggests that, for an institution as a whole to maintain excellence in research outputs, it needs to put in place cost-effective structures and systems, which will sustain continuous improvement of research quality in all areas.

Problem #9: The Problem of adopting a 'totalizing' philosophy in order to sustain continuous improvement in Academic Quality

The philosophical debates about the meaning and relevance of total quality management (TQM) in a higher education environment is still ongoing, and some still doubt the effectiveness of TQM approach for assessing, assuring, and managing the quality of academic services. There are already over 25 alternative management models based on the philosophy of Total Quality Management (TQM). These models include the EFQM Excellence Model developed by the European Foundation for Quality Management (EFQM, 1999); the Malcolm Baldrige National Quality Award (MBNQA, 2002) Model in the USA; and Kanji's Business Excellence Model (Kanji and Tambi, 1999). Some of these models are generic, and others have been specifically applied to higher education with some relative success in administrative and support-service areas, but less success in academic areas of teaching and research. This raises the question about the effectiveness of other management philosophies, which are alternatives change initiatives comparable to Total Quality Management; such as: Best Practice Benchmarking; and Business Process Management. The literature suggests that the global trend towards improving the quality of administrative and support-service activities has not been adequately matched by serious effort to improve the quality of teaching and learning, research and scholarship. This poses questions about the extent to which, an assessment of *academic quality* should include the assessment of the quality of key administrative and support-service activities - where 'totalizing' means inclusiveness.

APPENDIX: A2

A List of Broad & Specific Research Questions derived from the Research Problems in Appendix A1
Source: Osseo-Asare Jr. 2003

A VER GENERAL EXPLORATORY RESEARCH QUESTION

WHAT ARE THE CRITERIA OR CRITICAL SUCCESS FACTORS FOR DECIDING THE APPROPRIATENESS OF A QUALITY MANAGEMENT MODEL IN UK HEIs?

Types of Research Questions: B = Broad Question S = Specific Question

	QUESTIONNAIRE QUESTIONS	TYPE
1	Which of the following job positions do you occupy within your institution/school?	**B**
2	Do you have a Job Description clearly defining your responsibility for quality in your institution/school?	**S**
3	How many years experience do you have in the areas of quality and performance improvement, and/or best practice and excellence management?	**S**
4	Does your institution/school have a dedicated division/department/section solely responsible for quality management issues e.g. Teaching and Research Assessment Scores?	**S**
5	Does your institution/school have personnel at top management level e.g. deanery with responsibility for leading and formulating institution/school-wide quality improvement strategies?	**S**
6	Do you know your institution's/school's most recent QAA Score?	**S**
7	How would you describe your institution's/school's internal reporting system for quality management?	**S**
8	Please define or describe briefly the notion of 'Excellence' in the context of your institution/school based on your personal observation and experience?	**B**
9	Have the UK Quality Assurance Agency's requirements for quality improvement in higher education brought about significant quality improvement in your institution/school?	**S**
10	In your opinion what are some of the major strengths and weaknesses in the use of QAA procedures for quality management in higher education?	**S**
11	Into which category would you put the QAA procedures for assuring academic quality?	**S**
12	Which of the following Student perception measures have been implemented within your institution/school?	**S**
13	Which of the following Academic and/or Administrative Staff perception measures have been implemented within your institution/school?	**S**
14	The following perception measures are recognised by external agencies (e.g. QAA; Funding Councils; Publishers of League Tables; which of these have been implemented within your institution/school?	**S**
15	To establish the views, needs and priorities of staff, a range of approaches is used to capture direct feedback. Which of the following approaches have been implemented in your institution/school?	**S**
16	Which of the following perception measures have been implemented in your institution/school, in order to measure the perception the community/society has about your institution/school?	**S**
17	To what extent do you agree that previous QAA exercises conducted within your institution/school resulted in achieving improvements in the following performance measures?	**S**
18	Your personal involvement in the development and communication of the school's mission and vision, using top down, bottom up and horizontal communication channels.	**S**
19	Your personal and active involvement in sharing best practice and knowledge as basis for creating and sustaining a culture of excellence.	**S**
20	Your personal and active involvement in aligning staff job descriptions and reward systems with quality improvement policy and strategy in order to identify and prioritise quality improvement activities.	**B**
21	Your active involvement in encouraging and supporting inter-departmental and inter-school collaboration through participation in partnerships and joint improvement activities.	**S**

22	Your personal involvement in stimulating and sustaining staff involvement in health and safety, the environment and social responsibility issues through timely recognition of both team and individual efforts at all levels within the school.	S
23	Your personal involvement in acting upon your own future leadership requirements and upon the findings of learning activities.	S
24	Your personal and active involvement is aligning the school's structure, human resource plans, and key processes with its quality improvement policy and strategy in order to sustain team effort.	S
25	Your personal and active involvement in ensuring that an integrated system for managing quality improvement processes is developed, implemented and controlled.	S
26	Your personal and active involvement in determining and meeting the present and future needs, expectations and concerns of all identifiable stakeholders, e.g. students and staff.	S
27	Your personal and active participation in professional bodies, conferences and seminars, in order to promote and support strategies for sustaining quality improvement in higher education.	S
28	Your personal and active involvement in communicating your school's quality improvement objectives and targets to all identifiable stakeholders.	S
29	Your active involvement in information gathering to help define the market and market segment the school will operate in both now and in the future.	S
30	Basing quality improvement policy and strategy on information from internal and external performance indicators, marketing research and learning activities.	S
31	The need for quality improvement policy and strategy to clearly identify present and future critical success factors as basis for gaining competitive advantage.	S
32	Incorporating alternative scenarios and contingency plans into quality improvement policy and strategy to address risk and uncertainty in the future.	S
33	Your active involvement in the deployment of quality improvement policy and strategy throughout the school, through a framework of key/core processes.	S
34	Your regular evaluation of academic and/or administrative staff awareness of quality improvement policy and strategy throughout the school	S
35	Your active involvement in encouraging the use of quality improvement policy and strategy as basis for planning improvement activities and setting improvement objectives and targets throughout the school.	S
36	Your active involvement in the creation of synergy in partnership relationships to improve key processes and add value to both the internal and external customer-supplier chain.	S
37	Your personal and active defence of the requirements for funds in support of quality improvement policy and strategy implementation.	S
38	Your active involvement in managing the maintenance and utilisation of buildings, equipment, and materials to improve total asset life cycle performance.	S
39	Your active involvement in identifying and evaluating alternative and emerging technologies in the light of changing quality improvement policy and strategy and their impact on the school and society.	S
40	Your personal involvement in collecting, structuring, and managing information and knowledge, in support of your school's quality improvement policy and strategy.	S
41	Your personal and active involvement in piloting and controlling the implementation of new or changed processes.	S
42	Your personal and active involvement in identifying and prioritising improvement opportunities and other process changes both incremental and breakthroughs.	B
43	Your personal and active involvement in designing key processes needed to deliver quality improvement policy and strategy, based on operating philosophies and enabling technology, and setting process performance targets.	S
44	The need to be involved in the implementation of a systematic approach to measuring customer/stakeholder perception of the school.	S
45	Your personal and active involvement in identifying a comprehensive set of upstream financial and non-financial performance indicators that can be compared with targets and benchmarks.	S

46	Please evaluate the following stakeholders in terms of their power to influence the quality of teaching and learning in UK higher education institutions.	**B**
47	Please evaluate the following stakeholder groups in terms of the relative benefits each group would derive from improved quality of teaching, research, and support-services, in UK higher education institutions.	**B**
48	Please evaluate the following stakeholder groups in terms of their sustained interests in the survival of the higher education system in the UK.	**B**
49	Should stakeholder groups who benefit the greatest from the provision of higher education be made to pay for the benefits in amounts proportionate to the benefits derived?	**S**
50	Should higher education institutions be allowed to set up businesses; with their various stakeholders providing capital; and profits reinvested in the development of the institutions; as further development of their collaborative partnership with other organisations?	**S**
51	In the very long-term say 25-50 years, do you foresee a shift in central government policy from the present 'cut in government funding' for higher education to 'increase in funding'?	**B**
52	Please evaluate the following stakeholders in terms of the positive contributions they make towards the achievement of the quality and performance objectives of your school/institution.	**B**
53	Evaluate the following student/customer perception measures in terms of their relative importance in delivering quality improvement in your school/institution.	**S**
54	Please evaluate the following academic and/or administrative staff performance measures in terms of their importance to the delivery of improved quality within the school/institution.	**S**
55	Please evaluate the following perception measures – recognized by external funding agencies and publishers of League Tables – in terms of their relative importance in the formulation of quality and performance improvement strategies within the institution/school.	**S**
56	Please evaluate the following perception measures in terms of their relative importance in measuring the perception the community/society has about the institution/school.	**S**
57	In your opinion based on your own experience, is the use of performance measures, relevant in assessing individual and organisational levels of performance in a higher education environment?	**B**
58	Do you find the use of performance indicators in assessing the quality of teaching and research useful?	**S**
59	In practice do you link any of your staff performance indicators (e.g. high research assessment exercise scores) to a staff reward system (e.g. staff promotions)?	**B**
60	In view of the current political interest in widening access to higher education, do you consider Entry Standards in your school/institutions, as 'declining' or 'improving'?	**S**
61	Do you consider the difference between the Entry Standards and the Standards of degree awarded by your school/institution as 'widening' or 'narrowing'?	**S**
62	Please evaluate the following performance indicators in the school/institution for making internal judgements about the levels of academic and administrative quality, in terms of their relative importance and relative effectiveness in contributing to significant improvement in the quality of teaching and research.	**S**
63	Which of the following areas of higher education should a proposed model for quality improvement in higher education cover?	**S**
64	In your opinion is it 'possible' and 'feasible' to integrate models for improving the quality of academic activities with models for improving the quality of administrative activities?	**S**
65	In your view is the determination and satisfaction of the needs and expectations of the UK government agencies, such as the QAA and HEFCE, a critical success factor in the successful implementation of a model for quality and performance improvement in higher education?	**S**
66	Which of these two: 'Leadership for quality improvement' and 'Core processes for quality improvement', would you rank as the single most important critical success factor for sustaining quality and performance improvement initiatives in a higher education institution.	**S**
67	In your view which of the following premise should underpin a model for sustaining quality and performance improvement in UK higher education institutions?	**B**
68	Please evaluate the extent to which the proposed model structure, highlights the key factors for sustaining quality improvement which meets both internal and external requirements.	**B**
69	In your view does the proposed pictorial representation depict the holistic and integrated nature of the proposed model structure in Question#6 above?	**S**

LIST OF SEMI-STRUCTURED INTERVIEW THEMES, AND SAMPLE OF BROAD AND SPECIFIC QUESTIONS

No.	Themes	Broad Questions	Specific Questions
1	Best Practices for Excellence; Academic Excellence	How would you explain the term 'Excellence', and in which areas of the school has it been or is it being applied? Will individual HEIs be able to meet the demands of a composite definition of quality in Higher Education?	What does Excellence in Teaching mean? To what extent is the definition of quality as 'fitness for purpose' consistent with reflective teaching and research practices?
2	Evaluation of Best Practices; Best Practices in Academic Areas; Documentation of Best Practices	In your view, what is a 'Best Practice', and has the concept been successfully implemented in the areas of Teaching and Research within your School?	Is there any relationship between 'Excellence' and 'Best Practice'? How effective are Benchmarking initiatives in promoting internal transfer of good and best practices?
3	Stakeholders in Higher Education - Critical Success Factors;	What is the meaning of a Critical Success factor in the context of UK HE? Apart from Teaching and Research activities, what other activities should higher education institutions engage in as source for funding? How far will active engagement in commercial activities go to change the legal status of individual HEIs? How do HEIs achieve optimal balance of the conflicting needs and expectations of the diverse number of internal and external stakeholders?	What are the CSFs in the internal, external, and competitive environment in which UK HEIs operate? Do you think academics can be successful administrators? Should students be made to pay tuition fees at the economic rate? Will active engagement in commercial activities require a fundamental change in the Mission of individual HEIs?
4	Performance Management in Higher Education	In your own opinion, are performance indicators as basis for assessing performance in higher education still relevant? Are process ownership and accountability formally assigned to an individual or a team?	In your own opinion, what are the benefits and limitations of using performance indicators in higher education? Is the person or team responsible for process improvement also responsible for inputs and outputs?
5	Alternative Excellence Models in Higher Education; TQM and EFQM Model in Higher Education	Are you aware of 'Excellence Models' based on the TQM or the EFQM Models for managing quality in UK Higher Education Institutions? How far will the need to act strategically encourage collaborative partnership between pre-1992 and post-1992 HEIs with similar Mission? To what extent are the methodologies of the alternative academic quality models for : • Teaching and learning, based on the theory of constructivism rather than phenomenography? • Research and scholarship, based on the theory of constructivism rather than phenomenography? To what extent can academic and non-academic processes be aligned to TQM processes?	Is political correctness one of the reasons for not adopting TQM and EFQM Excellence Models? Is the EFQM Excellence Model suitable for teaching quality improvement in UK HEIs - relative to the QAA teaching excellence model? Is the EFQM Excellence Model suitable for research quality improvement in UK HEIs - relative to the HEFCE research excellence model? Should the word 'total' in TQM be replaces by the word 'sustainable' to give SQM?

APPENDIX: A3

FIVE-PART QUESTIONNAIRES FOR EXPLORATORY RESEARCH SURVEY

Source: Osseo-Asare Jr. 2003

PART	TITLE	NUMBER OF QUESTIONS	PAGES
ONE	Best Practices for Excellence	17	472
TWO	Evaluation of Best Practices	28	478
THREE	A Survey of Stakeholders in UK Higher Education	11	489
FOUR	A Survey of Performance Management in UK Higher Education	6	495
FIVE	A Proposed Excellence Model for UK Higher Education	7	498
	Total Number of Main Questions	69	

HIGHER EDUCATION SECTOR

PART ONE

BEST PRACTICES FOR EXCELLENCE

INSTRUCTION:

Part One covers 17 questions on your role in the quality improvement function within your organization in the quest for excellence through implementation of best practices. The information you give would be treated as confidential.

Thank You Very Much For Your Participation

1	**Which of the following positions do you occupy within your institution/school.** • Senior/Principal Lecturer ☐ • Senior Administrative Officer ☐ • Quality Manager ☐ • Others (please specify) ☐ .... code: QN=1
2	**Do you have a Job Description clearly defining your responsibility for quality in your institution/school?** ☐ YES ☐ NO ☐ NOT NECESSARY **If YES what is your Job Title?** .... **If NO or NOT NECESSARY what are the reasons for not having a Job Description ?** .... Code: QN=2
3	**How many years experience do you have in the areas of quality and performance improvement, and/or best practice and excellence management.** ☐ Less than 1 year ☐ Between 1 - 5 years ☐ 5 years and above Code: QN=3
4	**Does your institution/school have a dedicated division/department/section solely responsible for quality management issues e.g. Teaching and Research Assessment Scores?** ☐ Yes ☐ No ☐ Do Not Know **If NO, please briefly describe the arrangement you have in place for ensuring continuous improvement of your products/services.** .... Code: QN=4

5 To what extent are top management level e.g. deanery involved with the responsibility for leading and formulating institution/school-wide quality improvement strategies?

☐ Very Limited ☐ Less Extent ☐ Moderate Extent ☐ Some Extent ☐ Large Extent

Code: QN=5

6 Do you know your institution's/school's most recent QAA Score.

☐ YES ☐ NO ☐ DO NOT KNOW

If your response is either NO or DO NOT KNOW, please offer brief reasons for lack of knowledge of the scores.

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Code: QN=6

7 How would you describe your institution's/school's internal reporting system for quality management?

☐ Formal ☐ Informal ☐ Formal and Informal

Code: QN=7

8 Please define or describe briefly the notion of 'EXCELLENCE' in the context of your institution/school based on your personal observation and experience?

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Code: QN=8

9 Have the UK Quality Assurance Agency's requirements for quality improvement in higher education brought about significant quality improvement in your institution/school?

☐ YES ☐ NO ☐ DO NOT KNOW

Please briefly give reasons for your response.

.....
.....
.....

Code: QN=9

10 In your opinion what are some of the major strengths and weaknesses in the use of QAA procedures for quality management in higher education ?

Major Strengths

1.....
.....
.....
2.....
.....

Major Weaknesses

1.....
.....
.....
2.....
.....

Code: QN=10

11 Into which category would you put the QAA procedures for assuring academic quality? (Please select only one response).

- Inspection-based quality systems ☐
- Detection-based quality systems ☐
- Prevention-based quality systems ☐

Please briefly give reasons for your response:

.....
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.....
.....

Code: QN=11

12 Which of the following Students perception measures have been implemented within your institution/school (You may tick more than one box).

1. Teaching and Research quality ☐
2. Value of academic awards ☐
3. Reliability of services provided to students ☐
4. Social responsibility ☐
5. Environmental issues ☐
6. Flexibility of delivery of programmes/courses ☐
7. Others (please specify) ☐

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Code: QN=12

13 **Which of the following Academic and/or Administrative Staff perception measures have been implemented within your institution/ school. (You may tick more than one box).**

1. Equal opportunities, employment conditions ☐
2. Training and Career development ☐
3. Empowerment and leadership ☐
4. Performance appraisal ☐
5. Pay and benefits ☐
6. Environmental, Health and Safety policy and impact ☐
7. Others (please specify) ☐

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Code: QN=13

14 **The following perception measures are recognized by external agencies (e.g. QAA, Funding Councils, etc.) and publishers of League Tables. Which of these have been implemented within your institution/school? (You may tick more than one box).**

1. Teaching and Research Quality Strategy ☐
2. Quality Strategy for areas of administration ☐
3. Management of Learning Infrastructure ☐
4. Internal and External Communications strategy ☐
5. Collaborative partnerships ☐
6. Internal and External Quality Audit Reporting ☐
7. Research Assessment Exercise Scores ☐
8. Teaching Quality Assessments ☐
9. Entry Standards ☐
10. Staff-Student Ratios ☐
11. Facilities Spending ☐
12. First Class and 2:1s ☐
13. Graduate Destinations ☐
14. Published Annual League Table Positions ☐
15. Others (please specify) ☐

.....

Code: QN=14

15 **To establish the views, needs and priorities of staffs a range of approaches is used to capture direct feedback. Which of the following approaches have been implemented in your institution/school?**

1. Focus groups ☐
2. Handling Students and/or Staff complaints ☐
3. Student, Staff and other Stakeholder Surveys ☐
4. Others (please specify) ☐

.....

Code: QN=15

16 **Which of the following perception measures have been implemented in your institution/ school in order to measure the perception the community/society has about your institution/school?**

1. Equal opportunities practices ☐
2. Impact on local and national economies ☐
3. The school's ethical behaviour ☐
4. Support for sports and leisure within the community ☐
5. Activities to reduce and prevent pollution ☐
6. Disclosure of information to assist in the preservation and sustainability of resources ☐
7. Others (please specify) ☐

.....

Code: QN=16

17 **To what extent do you agree that previous QAA exercises conducted within your institution/school resulted in achieving improvements in the following performance measures:**

	Strongly Agree	Agree	Neither Agree Agree or Disagree	Disagree	Strongly Disagree
• Leadership for continuous improvement	☐	☐	☐	☐	☐
• Policy and strategy for quality	☐	☐	☐	☐	☐
• People/staff management for quality	☐	☐	☐	☐	☐
• Resource for quality e.g. funding	☐	☐	☐	☐	☐
• Collaborative Partnerships	☐	☐	☐	☐	☐
• Processes e.g teaching and learning	☐	☐	☐	☐	☐
• Results e g. Research Ranking	☐	☐	☐	☐	☐

Code: QN=17

THANK YOU VERY MUCH INDEED FOR YOUR PARTICIPATING

HIGHER EDUCATION SECTOR

PART TWO

EVALUATION OF BEST PRACTICES

INSTRUCTION:

Part Two covers 28 Best Practices that represent the characteristics of an ***excellent*** institution/school. Please evaluate each practice in terms of the 'degree of importance' and the 'degree of effectiveness' in its contribution to quality and performance improvement. Degree of importance: 1 = not at all important, 3 = relatively important, 5 = very important. Degree of effectiveness: 1 = not at all effective; 5 = relatively effective, 10 = extremely effective. The information you give would be treated as confidential.

Thank You Very Much For Your Participation

1

Your personal involvement in the development and communication of the school's mission and vision, using top down, bottom up and horizontal communication channels.

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=18; Leadership Practice #1

2

Your personal and active involvement in sharing best practice and knowledge as basis for creating and sustaining a culture of excellence.

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=19; Leadership Practice #2

3

Your personal and active involvement in aligning staff job descriptions and reward systems with quality improvement policy and strategy in order to identify and prioritize quality improvement activities.

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=20; Leadership Practice #3

4 **Your active involvement in encouraging and supporting inter-departmental and inter-school collaboration through participation in partnerships and joint improvement activities.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=21; Leadership Practice #4

5 **Your personal involvement in stimulating and sustaining staff involvement in health and safety, the environment and social responsibility issues through timely recognition of both team and individual efforts at all levels within the school.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=22; Policy and Strategy #1

6 **Your personal involvement in acting upon your own future leadership requirements and upon the findings of learning activities.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=23; Policy and Strategy #2

7 **Your personal and active involvement in aligning the school's structure, human resource plans, and key processes with its quality improvement policy and strategy in order to sustain team effort.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=24; Policy and Strategy #3

8 **Your personal and active involvement in ensuring that an integrated system for managing quality improvement processes is developed, implemented and controlled.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=25; People Management #1

9 **Your personal and active involvement in determining and meeting the present and future needs, expectations and concerns of all identifiable stakeholders e.g. students and staff.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=26; People Management #2

10 **Your personal and active participation in professional bodies, conferences and seminars, in order to promote and support strategies for sustaining quality improvement in higher education.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=27; People Management #3

11 **Your personal and active involvement in communicating your school's quality improvement objectives and targets to all identifiable stakeholders.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=28; Partnership and Resources #1

12 **Your active involvement in information gathering to help define the market and market segment the school will operate in both now and the future.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=29; Partnership and Resources #2

13 **Basing quality improvement policy and strategy on information from internal and external performance indicators, marketing research and learning activities.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=30; Partnership and Resources #3

14 **The need for quality improvement policy and strategy to clearly identify present and future critical success factors as basis for gaining competitive advantage.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=31; Processes #1

15 **Incorporating alternative scenarios and contingency plans into quality improvement policy and strategy to address risk and uncertainty in the future.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=32; Processes #2

16 **Your active involvement in the deployment of quality improvement policy and strategy throughout the school, through a framework of key/core processes.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=33; Processes #3

17 **Your regular evaluation of academic and/or administrative staff awareness of quality improvement policy and strategy throughout the school.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=34; Customer Results #1

18 **Your active involvement in encouraging the use of quality improvement policy and strategy as basis for planning improvement activities and setting improvement objectives and targets throughout the school.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 Relatively Effective ☐5 ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=35; Customer Results #2

19 **Your active involvement in the creation of synergy in partnership relationships to improve key processes and add value to both the internal and external customer-supplier chain.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 ☐5 Relatively Effective ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=36; Customer Results #3

20 **Your personal and active defence of the requirements for funds in support of quality improvement policy and strategy implementation.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 ☐5 Relatively Effective ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=37; People Results #1

21 **Your active involvement in managing the maintenance and utilization of buildings, equipment and materials to improve total asset life cycle performance.**

Degree of importance of practice

Not at all Important ☐1 ☐2 Relatively Important ☐3 ☐4 Very Important ☐5

Degree of effectiveness of practice

Not at all Effective ☐1 ☐2 ☐3 ☐4 ☐5 Relatively Effective ☐6 ☐7 ☐8 ☐9 Extremely Effective ☐10

Code: QN=38; People Results #2

22 **Your active involvement in identifying and evaluating alternative and emerging technologies in the light of changing quality improvement policy and strategy and their impact on the school and society.**

Degree of importance of practice

Not at all Important		Relatively Important		Very Important
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Degree of effectiveness of practice

Not at all Effective				Relatively Effective				Extremely Effective	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Code: QN=39; People Results #3

23 **Your personal involvement in collecting, structuring and managing information and knowledge in support of your school's quality improvement policy and strategy.**

Degree of importance of practice

Not at all Important		Relatively Important		Very Important
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Degree of effectiveness of practice

Not at all Effective				Relatively Effective				Extremely Effective	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Code: QN=40; Society Results #1

24 **Your personal and active involvement in piloting and controlling the implementation of new or changed processes.**

Degree of importance of practice

Not at all Important		Relatively Important		Very Important
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Degree of effectiveness of practice

Not at all Effective				Relatively Effective				Extremely Effective	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Code: QN=41; Society Results #2

25 **Your personal and active involvement in identifying and prioritizing improvement opportunities and other process changes both incremental and breakthroughs.**

Degree of importance of practice

Not at all Important		Relatively Important		Very Important
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Degree of effectiveness of practice

Not at all Effective				Relatively Effective				Extremely Effective	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Code: QN=42; Society Results #3

26 **Your personal and active involvement in designing key processes needed to deliver quality improvement policy and strategy, based on operating philosophies and enabling technology, and setting process performance targets.**

Degree of importance of practice

Not at all Important		Relatively Important		Very Important
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Degree of effectiveness of practice

Not at all Effective				Relatively Effective				Extremely Effective	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Code: QN=43; Key Performance Results #1

27 **The need to be involved in the implementation of a systematic approach to measuring customer/stakeholder perception of the school.**

Degree of importance of practice

Not at all Important		Relatively Important		Very Important
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Degree of effectiveness of practice

Not at all Effective				Relatively Effective				Extremely Effective	
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7	☐ 8	☐ 9	☐ 10

Code: QN=44; Key Performance Results #2

	Your personal and active involvement in identifying a comprehensive set of upstream financial and non-financial performance indicators that can be compared with targets and benchmarks.
28	Degree of importance of practice **Not at all Important** ☐1 ☐2 **Relatively Important** ☐3 ☐4 **Very Important** ☐5 Degree of effectiveness of practice **Not at all Effective** ☐1 ☐2 ☐3 ☐4 **Relatively Effective** ☐5 ☐6 ☐7 ☐8 **Extremely Effective** ☐9 ☐10
	Code: QN=45; Key Performance Results #3

THANK YOU VERY MUCH INDEED FOR YOUR PARTICIPATION

HIGHER EDUCATION SECTOR

PART THREE

A SURVEY OF STAKEHOLDERS IN HIGHER EDUCATION

INSTRUCTION:

Part Three covers 11 questions dealing with various stakeholders with different long-term interests in higher education. Please attempt all questions. The information you give would be treated as confidential.

Thank You Very Much For Your Participation

1 Please evaluate the following stakeholders in terms of their power to influence the quality of teaching and learning in UK higher education institutions.

List of Stakeholders in UK Higher Education	No Power to influence		Moderate Power to influence		Great Power to influence
• Students who pay their own fees	☐1	☐2	☐3	☐4	☐5
• Students who do not pay their own fees	☐1	☐2	☐3	☐4	☐5
• Academic Staff e g. Teaching and Research staff	☐1	☐2	☐3	☐4	☐5
• Administrative Staff e g at chancellory/ deanery level	☐1	☐2	☐3	☐4	☐5
• Support Services Staff e g. building maintenance	☐1	☐2	☐3	☐4	☐5
• Parents who pay Tuition fees	☐1	☐2	☐3	☐4	☐5
• Local Authority e g Derby City Council	☐1	☐2	☐3	☐4	☐5
• Higher Education Funding Councils	☐1	☐2	☐3	☐4	☐5
• Quality Assurance Agency	☐1	☐2	☐3	☐4	☐5
• Local/National Employers	☐1	☐2	☐3	☐4	☐5
• Local/National Tax Payers	☐1	☐2	☐3	☐4	☐5
• Others (please specify)					
1	☐1	☐2	☐3	☐4	☐5
2...	☐1	☐2	☐3	☐4	☐5
3...	☐1	☐2	☐3	☐4	☐5

Code: QN=46

2 Please evaluate the following stakeholder groups in terms of the relative benefits each group would derive from improved quality of teaching, research and services in UK higher education institutions.

List of Stakeholders in UK Higher Education	No Benefit		Moderate Benefit		Great Benefit
• All categories of Students	☐1	☐2	☐3	☐4	☐5
• Academic Staff e g. Teaching and Research staff	☐1	☐2	☐3	☐4	☐5
• Administrative Staff e g. at chancellory/ deanery level	☐1	☐2	☐3	☐4	☐5
• Support Services Staff e g. building maintenance	☐1	☐2	☐3	☐4	☐5
• Parents who pay Tuition fees	☐1	☐2	☐3	☐4	☐5
• The UK Government	☐1	☐2	☐3	☐4	☐5
• Higher Education Funding Councils e g. HEFCE	☐1	☐2	☐3	☐4	☐5
• Local/National Employers	☐1	☐2	☐3	☐4	☐5
• Local/National Tax Payers	☐1	☐2	☐3	☐4	☐5
• Others stakeholder groups (please specify)					
1...	☐1	☐2	☐3	☐4	☐5
2.....	☐1	☐2	☐3	☐4	☐5
3.....	☐1	☐2	☐3	☐4	☐5

Code: QN=47

3 Please evaluate the following stakeholder groups in terms of the their sustained interests in the survival of the higher education system in the United Kingdom.

List of Stakeholders in UK Higher Education	Short-Term Interest		Medium-Term Interest		Long-Term Interest
• All categories of Students	☐1	☐2	☐3	☐4	☐5
• All categories of Staff as employees	☐1	☐2	☐3	☐4	☐5
• Parents who pay Tuition fees	☐1	☐2	☐3	☐4	☐5
• The UK Government/Local Authorities	☐1	☐2	☐3	☐4	☐5
• Higher Education Funding Councils e g. HEFCE	☐1	☐2	☐3	☐4	☐5
• Local/National Employers	☐1	☐2	☐3	☐4	☐5
• Local/National Tax Payers	☐1	☐2	☐3	☐4	☐5
• Others stakeholder groups (please specify)					
1. ...	☐1	☐2	☐3	☐4	☐5
2.....	☐1	☐2	☐3	☐4	☐5
3.....	☐1	☐2	☐3	☐4	☐5

Code: QN=48

4 Should stakeholder groups who benefit the greatest from the provision of higher education be made to pay for the benefits in amounts proportionate to the benefits derived?

☐ Yes ☐ No ☐ Do Not Know

Please offer brief reason(s) for your response.

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Code; QN=49

5 Should higher education institutions be allowed to set up businesses with their various stakeholders providing capital and profits reinvested in the development of the institution as further development of their collaborative partnership with other organizations?

☐ YES ☐ NO ☐ DO NOT KNOW

Please briefly explain the reason(s) for your response.

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Code: QN=50

6 **In the very long-term say 25 – 50 years, do you foreseen a shift in central government policy from the present 'cut in government funding' for higher education to 'increase in funding'?**

☐ YES ☐ NO ☐ DO NOT KNOW

Please offer brief reasons for your response highlighting the basis for your forecasts.

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Code: QN=51

7 **Please evaluate the following stakeholders in terms of the positive contributions they make in achieving the quality and performance objectives of your school/institution.**

List of Stakeholders in UK Higher Education	No Contribution		Moderate Contribution		Very Significant Contribution
• Students – undergraduates and masters level	☐1	☐2	☐3	☐4	☐5
• Doctoral Research Students	☐1	☐2	☐3	☐4	☐5
• Research-active academic Staff – no administration work	☐1	☐2	☐3	☐4	☐5
• Administrative Staff e g. at chancellory/ deanery/heads	☐1	☐2	☐3	☐4	☐5
• Support Services Staff e g infrastructure maintenance	☐1	☐2	☐3	☐4	☐5
• Parents of students	☐1	☐2	☐3	☐4	☐5
• Local Authority e.g. Derby City Council	☐1	☐2	☐3	☐4	☐5
• Higher Education Funding Councils	☐1	☐2	☐3	☐4	☐5
• Quality Assurance Agency	☐1	☐2	☐3	☐4	☐5
• Local/National Employers	☐1	☐2	☐3	☐4	☐5
• Local/National Tax Payers	☐1	☐2	☐3	☐4	☐5
• Others (please specify)					
1.....	☐1	☐2	☐3	☐4	☐5
2	☐1	☐2	☐3	☐4	☐5

Code: QN=52

8 **Evaluate the following Student/Customer perception measures in terms of their relative importance in delivery quality improvement in your school/institution.**

Perception Measures	Not at all Important		Moderately Important		Extremely Important
8. Teaching, Learning and Research quality	☐1	☐2	☐3	☐4	☐5
9. Flexibility and Reliability of Programme/Service delivery	☐1	☐2	☐3	☐4	☐5
10. Others (please specify)					
1	☐1	☐2	☐3	☐4	☐5
2	☐1	☐2	☐3	☐4	☐5

Code: QN=53

9 **Please evaluate the following Academic and/or Administrative Staff perception measures in terms of their importance to the delivery of improved quality within the school.**

Perception Measures	Not at all Important		Moderately Important		Extremely Important
5. Education and Training for improved quality	☐1	☐2	☐3	☐4	☐5
6. Empowerment and leadership for driving improvements	☐1	☐2	☐3	☐4	☐5
7. Performance related reward systems	☐1	☐2	☐3	☐4	☐5
8. Environmental, Health and Safety policy and impact	☐1	☐2	☐3	☐4	☐5
9. Others (please specify)					
1.....	☐1	☐2	☐3	☐4	☐5
2.....	☐1	☐2	☐3	☐4	☐5

Code: QN=54

10 **Please evaluate the following perception measures - recognized by external funding agencies and publishers of League Tables - in terms of their importance in the formulation of quality and performance improvement strategies within the school/institution.**

Perception Measures	Not at all Important		Moderately Important		Extremely Important
16. Total Quality Strategy	☐1	☐2	☐3	☐4	☐5
17. Human Resource Management Strategy	☐1	☐2	☐3	☐4	☐5
18. Management of Learning Infrastructure	☐1	☐2	☐3	☐4	☐5
19. Internal and External Communications strategy	☐1	☐2	☐3	☐4	☐5
20. Collaborative partnerships	☐1	☐2	☐3	☐4	☐5
21. Internal and External Quality Audit Reporting	☐1	☐2	☐3	☐4	☐5
22. Research Assessment Exercise Scores	☐1	☐2	☐3	☐4	☐5
23. Teaching Quality Assessments	☐1	☐2	☐3	☐4	☐5
24. Entry Standards	☐1	☐2	☐3	☐4	☐5
25. Staff-Student Ratios	☐1	☐2	☐3	☐4	☐5
26. Facilities Spending	☐1	☐2	☐3	☐4	☐5
27. First Class and 2:1s	☐1	☐2	☐3	☐4	☐5
28. Graduate Destinations	☐1	☐2	☐3	☐4	☐5
29 Published Annual League Table Positions	☐1	☐2	☐3	☐4	☐5
30. Others (please specify)					
1	☐1	☐2	☐3	☐4	☐5
2.....	☐1	☐2	☐3	☐4	☐5

Code: QN=55

	Please evaluate the following perception measures in terms of their relative importance in measuring the perception the community/society has about the school/institution?					
	Perception Measures	**Not at all Important**		**Moderately Important**		**Extremely Important**
	8. Equal opportunities practices	☐1	☐2	☐3	☐4	☐5
	9. Impact on local and national economies	☐1	☐2	☐3	☐4	☐5
11	10. The school's ethical behaviour	☐1	☐2	☐3	☐4	☐5
	11. Support for sports and leisure	☐1	☐2	☐3	☐4	☐5
	12. Activities to reduce and prevent pollution	☐1	☐2	☐3	☐4	☐5
	13. Disclosure of information on sustainability of resources	☐1	☐2	☐3	☐4	☐5
	14. Others (please specify)					
	1.....	☐1	☐2	☐3	☐4	☐5
	2.....	☐1	☐2	☐3	☐4	☐5
	Code: QN=56					

THANK YOU VERY MUCH INDEED FOR YOUR PARTICIPATION

HIGHER EDUCATION SECTOR

PART FOUR

A SURVEY OF PERFORMANCE MANAGEMENT IN HIGHER EDUCATION

INSTRUCTION:

Part Four covers 6 questions aimed at capturing your views on the relevance of performance indicators and performance management in higher education institutions. The information you give would be treated as confidential.

Thank You Very Much For Your Participation

1 **In your opinion based on your own experience is the use of Performance Measures relevant in assessing individual and organizational levels of performance in a higher education environment?**

Not at all Relevant — Moderately Relevant — Extremely Relevant

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 ☐8 ☐9 ☐10

Code: QN=57

2 **Do you find the use of Performance Indicators in assessing the quality of Teaching and Research useful?**

Not at all Useful — Moderately Useful — Extremely Useful

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 ☐8 ☐9 ☐10

Code: QN=58

In practice do you link any of your staff performance indicators (e.g. high Research Assessment Exercise Scores) to a staff reward system (e.g. staff promotions)?

☐ Yes ☐ No ☐ Do Not Know

3 **If your response is 'NO', Please briefly give reasons.**

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Code: QN=59

4 **In view of the current political interest in widening access to higher education, do you consider Entry Standards in your school/institution as 'declining' or 'improving'?**

☐ Declining ☐ Improving ☐ Do Not Know

If your response is that Standards are 'Declining', please identify the main reasons.

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.....

Code: QN=60

5 **Do you consider the difference between the Entry Standards and the Standards of degree awarded by your school/institution as 'widening' or 'narrowing'?**

☐ Widening ☐ Narrowing ☐ Do Not Know

If your response is that the difference is 'Widening', please offer briefly reasons why.

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Code: QN=61

6 **Please evaluate the following performance indicators in the school/institution for making internal judgements about the levels of academic and administrative quality.**

ACADMIC QUALITY	Degree of Importance 1 2 3 4 5	Degree of Effectiveness 1 2 3 4 5
1. Cost per FTE student	☐☐☐☐☐	☐☐☐☐☐
2. Research income	☐☐☐☐☐	☐☐☐☐☐
3. Research Assessment Exercise Score	☐☐☐☐☐	☐☐☐☐☐
4. Quality Assurance Exercise Score	☐☐☐☐☐	☐☐☐☐☐
5. Submission Rates for Research degrees	☐☐☐☐☐	☐☐☐☐☐
6 Number of Sponsored Research Students	☐☐☐☐☐	☐☐☐☐☐
7. Occupation of Graduates after 1-5 years	☐☐☐☐☐	☐☐☐☐☐
8. FT staff to FTE Student Ratio	☐☐☐☐☐	☐☐☐☐☐
9. Equipment costs per FT academic staff	☐☐☐☐☐	☐☐☐☐☐
10. Membership of Research Councils	☐☐☐☐☐	☐☐☐☐☐
11. Peer Review	☐☐☐☐☐	☐☐☐☐☐
12. Number of Research Publications	☐☐☐☐☐	☐☐☐☐☐
13. Staff participation in improvement teams	☐☐☐☐☐	☐☐☐☐☐
14. Staff Absenteeism and Sickness levels	☐☐☐☐☐	☐☐☐☐☐
15. Staff Turnover	☐☐☐☐☐	☐☐☐☐☐
16. Number of staff/student Complaints	☐☐☐☐☐	☐☐☐☐☐
17. Number of Press Coverage	☐☐☐☐☐	☐☐☐☐☐
18. Accolades and Awards received	☐☐☐☐☐	☐☐☐☐☐
19 Partnerships with Local Authorities	☐☐☐☐☐	☐☐☐☐☐
20. Sharing of Best Practices and Knowledge	☐☐☐☐☐	☐☐☐☐☐

ADMINISTRATIVE QUALITY	Degree of importance 1 2 3 4 5	Degree of effectiveness 1 2 3 4 5
1. Administrative costs per FTE student	☐☐☐☐☐	☐☐☐☐☐
2. Premise costs per FTE student	☐☐☐☐☐	☐☐☐☐☐
3. Library costs per FTE student	☐☐☐☐☐	☐☐☐☐☐
4. Careers Service Costs per FTE student	☐☐☐☐☐	☐☐☐☐☐
5. Ratio of Support Staff to Academic Staff	☐☐☐☐☐	☐☐☐☐☐

Code: QN=62

THANK YOU VERY MUCH INDEED

HIGHER EDUCATION SECTOR

PART FIVE

A PROPOSED EXCELLENCE MODEL FOR HIGHER EDUCATION

INSTRUCTION:

Part Five is the final part of the Questionnaire Survey. It covers 7 questions on the proposed model for sustaining quality and performance improvement within UK higher education institutions. The structure of the model is based on current literature and not on empirical data. The final model would however be based on mainly empirical data. Please attempt all questions to the best of your ability. The information you give would be treated as confidential.

Thank You Very Much For Your Participation

1 **Which of the following areas of Higher Education should a proposed model for quality improvement in higher education cover?**

* Academic areas ☐
* Administration ☐
* Support Services ☐
* Others (please specify) ☐

.....

Code: QN=63

2 **In your opinion is it 'possible' and 'feasible' to INTEGRATE models for improving the quality of academic activities with models for improving administrative activities?**

Level of POSSIBILITY - in providing a conceptual framework for management.

Not At All Possible				Moderately Possible					Highly Possible
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Level of FEASIBILITY - in terms of implementation success.

Not At All Feasible				Moderately Feasible					Highly Feasible
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Code: QN=64

3 **In your view is the determination and satisfaction of the needs and expectations of the UK government agencies such as the QAA and HEFCE a critical success factor in the successful implementation of a model for quality and performance improvement in higher education?**
QAA: Quality Assurance Agency; HEFCE: Higher Education Funding Council for England.

☐ Yes ☐ No ☐ Do Not Know

Please give the main reason(s) for your response.

.....
.....
.....
.....

Code: QN=65

4 ***'Leadership for quality improvement'*** **and** ***'Core processes for quality improvement'*** **which of these two would you rank as the single most important critical success factor for sustaining quality and performance improvement initiatives in higher education?**

☐ **Leadership** ☐ **Processes** ☐ **Both when integrated**

Please offer some reasons for your ranking:

.....
.....
.....

Code: QN=66

In your view which of the following premise should underpin a model for sustaining quality and performance improvement in UK higher education institutions?

5

☐ LEADERSHIP at all levels within a higher education institution should drive resources through core processes in order to achieve predetermined results and ultimately overall institutional objectives?

☐ CORE PROCESSES at all levels within a higher education institution should drive resources through people in order to achieve predetermined results and ultimately overall institutional objectives?

☐ Level of FUNDING at all levels within a higher education institution should drive leadership through processes in order to achieve predetermined results and ultimately overall institutional objectives?

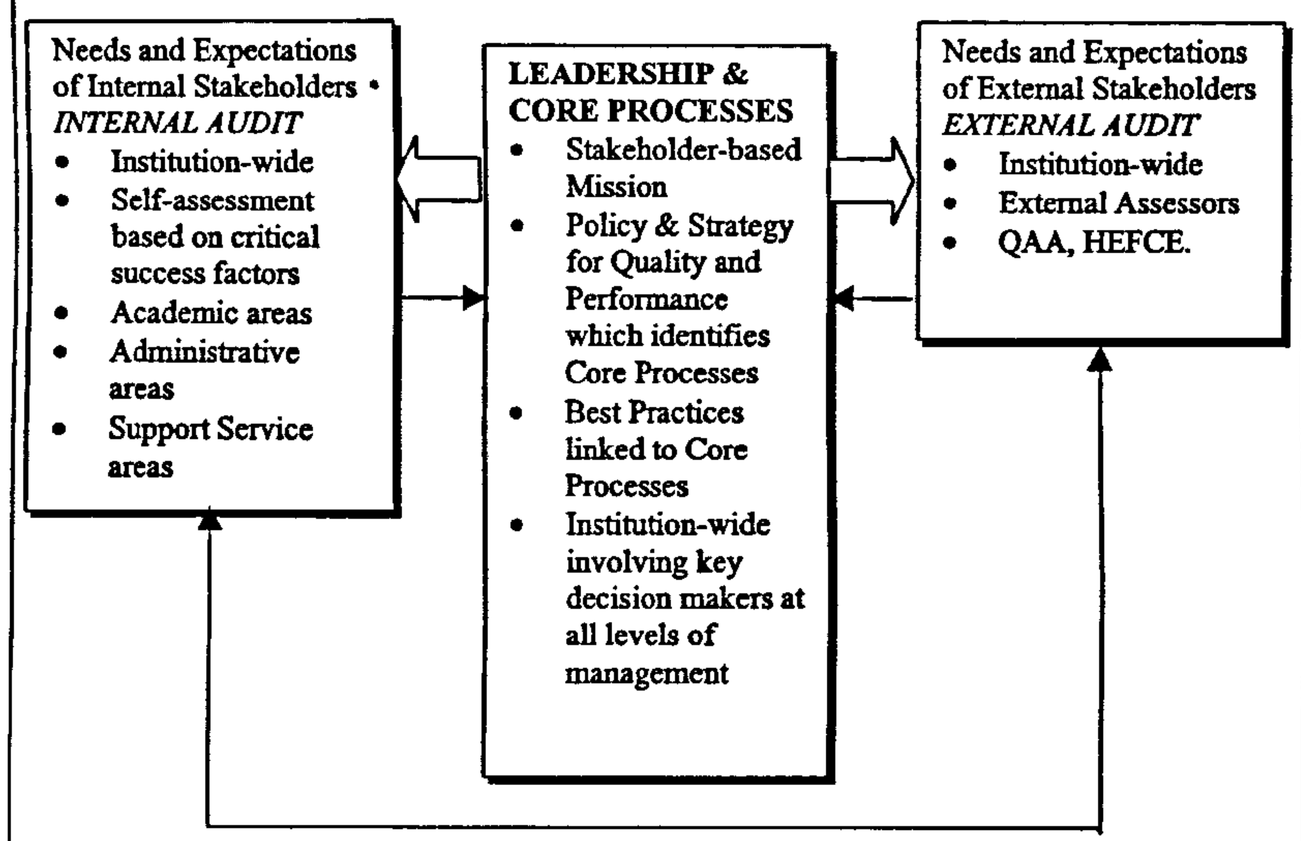
☐ Others (please specify)

.....
.....
.....
.....
.....
.....

Code: QN=67

At the macro level the structure of the proposed model for sustaining quality and performance improvement in higher education may look like the one below. The **'large'** arrows represent 'drivers' i.e. Leadership & Core Processes should be aimed at successful implementation of internal and external audit programmes. The **'small'** arrows represent learning and innovation through a feedback mechanism.

6



Code: QN=68

Please evaluate the extent to which this structure highlights the key factors for sustaining quality improvement which meets both internal and external requirements.

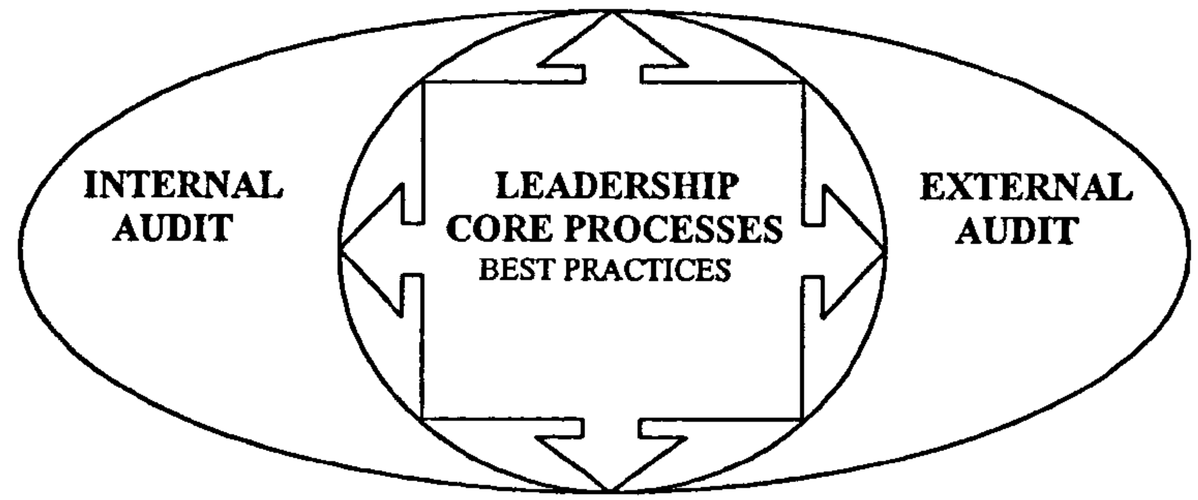
Small Extent ☐1 ☐2 ☐3 ☐4 **Large Extent** ☐5 ☐6 ☐7 ☐8 ☐9 ☐10 **Great Extent**

It is hoped that the proposed model would recognise the central role of 'leadership linked to people management' and 'core processes linked to best practices' as the most important critical success factors in sustaining quality and performance improvement in higher education.

7

In your view does the 'pictorial representation' below satisfactorily depict the 'holistic' and 'integrated' nature of the intended model? The 'arrows' are seen branching out to emphasis the need for leadership and core processes to 'spread' out into every area and level of management within the institution. The 'circular' frame emphasises the holistic and integrated nature of the model.

Not Satisfactorily Depicted ☐1 ☐2 ☐3 ☐4 **Satisfactorily Depicted** ☐5 ☐6 ☐7 ☐8 ☐9 ☐10 **Excellently Depicted**



Please offer any views on how to best improve the 'pictorial' representation of the intended model.

.....
.....
.....
.....
.....
.....
.....

Code: QN=69

THANK YOU VERY MUCH INDEED FOR YOUR COOPERATION

APPENDIX: A4

LIST OF INTERVIEW THEMES AND SAMPLE QUESTIONS

Source: Osseo-Asare Jr., 2003

LIST OF THEMES

LIST OF QUESTIONS

APPENDIX: B1

SPSS DATA PRESENTATION - QUESTIONNAIRE PART ONE

Source: Osseo-Asare Jr., 2003

id	q1	q2	q3	q4	q5	q6	q7	q9	q11	q17.1	q17.2	q17.3	q17.4	q17.5	q17.6	q17.7
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2	1	3	3	1	5	1	3	2	1	5	3	5	2	5	5	2
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5	1	2	3	2	3	1	3	2	1	4	2	5	2	2	1	1
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13	3	2	3	1	5	1	3	2	1	3	3	2	2	2	2	2
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15	1	1	3	1	5	1	3	2	1	2	2	2	2	2	2	1
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42	3	1	3	1	1	1	3	1	1	4	2	5	2	2	1	1

	Name	Type	Width	Decimals	Label	Values
1	id	Numeric	8	0	identity of HEIs	None
2	q1	Numeric	8	0	staff	{1, Senior Aca
3	q2	Numeric	8	0	job	{1, Yes}...
4	q3	Numeric	8	0	years	{1, < 1 year}...
5	q4	Numeric	8	0	structure	{1, Yes}...
6	q5	Numeric	8	0	leader	{1, Large Exte
7	q6	Numeric	8	0	ICT	{1, Yes}...
8	q7	Numeric	8	0	ICT	{1, Formal}...
9	q9	Numeric	8	0	QAA	{1, Yes}...
10	q11	Numeric	8	0	QAA	{1, Inspection-
11	q17.1	Numeric	8	0	leadership	{1, Strongly Ag
12	q17.2	Numeric	8	0	policy & strategy	{1, Strongly Ag
13	q17.3	Numeric	8	0	staff management	{1, Strongly Ag
14	q17.4	Numeric	8	0	resources	{1, Strongly Ag
15	q17.5	Numeric	8	0	partnerships	{1, Strongly Ag
16	q17.6	Numeric	8	0	processes	{1, Strongly Ag
17	q17.7	Numeric	8	0	results	{1, Strongly Ag

APPENDIX: B2

PRESENTATION OF SCALE RESPONSES TO QUESTIONNAIRE PART TWO USING MICROSOFT EXCEL

Source: Osseo-Asare Jr., 2003

	1 leadership			2 leadership			3 leadership			4 leadership				5 policy			6 policy			7 policy			
	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL
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4	5	10	15	5	10	15	2	2	4	1	2	3	37	2	2	4	5	2	7	2	2	4	15
5	5	10	15	5	2	7	5	10	15	1	10	11	48	5	10	15	5	1	6	5	10	15	36
6	5	10	15	5	1	6	4	5	9	1	5	6	36	3	5	8	5	2	7	3	5	8	23
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8	5	10	15	5	10	15	4	2	6	5	5	10	46	3	2	6	5	2	7	3	1	4	16
9	5	9	14	5	10	15	5	10	15	1	10	11	55	5	10	15	5	3	8	5	10	15	38
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APPENDIX: B2 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Two Using Microsoft Excel
Source: Osseo-Asare Jr., 2003

	8 staff			9 staff			10 staff					11 resource			12 resource			13 resource					14 process	
Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total
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2	3	5	3	5	8	4	7	11	24	5	2	7	3	2	5	5	8	13	25	3	5	8
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APPENDIX: B2 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Two Using Microsoft Excel
Source: Osseo-Asare Jr., 2003

	15 process			16 process				17 students			18 students			19 students				20 staff			21 staff	
Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total	Importance	Effectiveness	Total
2	3	5	4	7	11	16	2	3	5	3	5	8	1	1	2	16	3	5	8	2	2	4
3	3	6	3	5	8	22	5	5	10	3	6	9	3	5	8	27	3	10	13	3	2	5
3	2	5	5	1	6	26	5	5	10	3	6	9	3	5	8	27	3	2	5	5	2	7
3	5	8	5	1	6	21	5	5	10	3	5	8	2	2	4	22	3	2	5	2	2	4
5	1	6	5	10	15	36	5	5	10	5	10	15	5	3	8	33	3	2	5	5	10	15
5	2	7	5	1	6	19	4	6	10	5	8	13	3	5	8	31	3	2	5	4	1	5
3	3	6	5	2	7	17	5	5	10	3	5	8	4	5	9	27	3	6	9	3	2	5
4	7	11	5	2	7	23	6	6	10	3	5	8	4	2	6	24	3	2	5	3	1	4
5	3	8	5	10	15	38	5	10	15	3	6	9	5	1	6	30	3	2	5	5	2	7
4	2	6	5	2	7	19	5	5	10	3	5	8	5	2	7	25	3	1	4	3	1	4
5	3	8	4	2	6	21	5	5	10	4	9	13	5	10	15	36	3	6	11	5	9	14
2	2	4	5	1	6	14	2	2	4	3	3	6	2	2	4	14	3	2	5	2	2	4
5	1	6	5	2	7	20	3	5	8	3	5	8	3	5	8	24	3	1	4	3	3	6
3	5	8	5	2	7	23	4	5	9	3	6	9	3	1	4	22	3	2	5	3	3	6
5	10	15	5	10	15	45	5	10	15	3	6	9	5	3	8	32	3	1	4	5	2	7
3	2	5	5	3	8	20	3	5	8	3	4	7	3	2	5	20	3	2	5	2	2	4
4	3	7	5	10	15	28	5	5	10	5	10	15	3	5	8	33	3	1	4	3	1	4
5	3	8	5	2	7	22	5	5	10	5	10	15	5	1	6	31	3	2	5	5	10	15
4	3	7	3	5	8	21	3	5	9	3	5	8	2	2	4	21	3	2	5	4	7	11
5	2	7	5	2	7	22	5	10	15	3	6	9	5	2	7	31	3	2	5	5	2	7
4	2	6	4	9	13	24	5	10	15	3	5	8	5	2	7	30	3	2	5	5	2	7
5	3	8	5	2	7	22	5	5	10	3	6	9	5	3	8	27	3	2	5	5	2	7
5	8	13	4	2	6	26	5	7	12	4	8	12	5	8	13	37	3	1	4	5	5	10
5	9	14	3	5	8	27	4	6	9	3	4	7	3	7	10	36	3	2	5	4	8	12
3	3	6	3	5	8	22	2	2	4	3	4	7	5	3	8	19	3	4	7	5	3	8
5	3	8	4	2	6	29	5	5	10	3	6	9	4	1	5	24	3	3	6	3	2	5
5	2	7	5	2	7	20	5	10	15	3	5	8	5	1	6	29	3	1	4	5	2	7
3	5	8	5	2	7	24	5	10	15	3	9	12	3	2	5	32	3	5	8	5	1	6
5	6	11	3	2	5	34	4	6	10	5	6	11	4	2	6	27	3	7	10	5	9	14
4	3	7	5	1	6	29	5	7	12	5	10	15	4	2	6	33	4	2	6	5	10	15
4	3	7	5	2	7	31	3	6	9	3	6	9	4	2	6	23	3	1	4	2	1	3
3	5	8	5	5	10	26	3	6	8	3	5	8	3	2	5	21	3	3	6	2	3	5
5	8	13	3	6	9	28	5	6	11	3	6	11	3	5	8	30	3	5	8	3	8	11
5	3	8	5	1	6	21	5	10	15	3	10	13	5	3	8	36	3	1	4	5	10	15
5	5	10	5	2	7	29	4	7	11	3	5	8	5	10	15	34	5	2	7	3	3	6
5	5	10	5	2	7	25	4	3	7	5	5	13	4	2	6	26	5	5	10	5	5	10
5	3	8	5	2	7	30	5	10	15	3	5	8	5	3	8	31	3	3	6	4	2	6
5	3	8	5	3	8	23	5	5	10	3	6	9	3	5	8	27	3	2	5	2	2	4
2	1	3	4	1	5	13	1	1	2	3	4	7	3	3	6	15	1	1	2	1	1	2
4	1	5	5	1	6	18	5	5	10	3	9	12	3	1	4	26	3	1	4	5	7	12
2	3	5	5	7	12	25	5	5	10	3	4	7	5	8	13	38	4	5	9	3	2	5
3	5	8	4	6	10	24	4	5	9	4	6	12	3	5	8	29	4	7	11	4	7	11

APPENDIX: B2 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Two Using Microsoft Excel
Source: Osseo-Asare Jr., 2003

	22 staff				23 society				24 society				25 society				26 performance				27 performance				28 performance		
Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL	Importance	Effectiveness	Total	Importance	Effectiveness	Total	Importance	Effectiveness	Total	TOTAL
2	4	6	18	3	5	8	3	6	9	3	5	8	26	4	7	11	3	2	5	2	2	4	20
3	5	8	26	3	6	9	3	7	10	3	4	7	26	4	7	11	3	2	5	2	4	6	22
5	5	10	22	3	5	8	3	10	13	5	10	15	36	5	3	7	3	5	8	5	1	6	21
3	4	7	16	3	5	8	2	2	4	3	4	7	19	2	3	5	2	2	4	2	2	4	13
3	10	13	33	3	5	8	3	10	13	5	10	15	36	5	2	7	5	2	7	5	10	15	29
3	7	10	20	3	8	11	3	8	11	5	10	15	37	4	2	6	3	2	5	3	5	8	19
3	5	8	22	3	6	9	3	7	10	4	6	10	28	5	3	7	3	2	5	4	2	6	16
3	5	8	17	3	5	8	3	5	8	3	5	8	24	5	2	7	3	2	5	3	4	7	19
5	5	10	22	3	5	8	3	10	13	5	10	15	36	5	2	7	3	1	4	5	2	7	18
3	5	8	16	3	5	8	3	10	13	5	10	15	36	5	2	7	3	5	8	5	3	8	23
3	10	13	36	3	5	8	3	5	8	3	5	8	24	5	1	6	5	2	7	3	5	8	21
3	5	8	17	3	5	8	2	2	4	3	5	8	30	3	4	7	3	2	5	5	2	7	19
3	5	8	18	3	5	8	3	5	8	5	5	10	26	4	5	9	3	2	5	4	5	9	23
3	4	7	18	3	5	8	3	7	10	3	4	7	26	4	5	9	3	5	8	5	2	7	24
5	5	10	21	5	10	15	3	10	13	5	10	15	43	5	1	6	3	2	5	5	3	8	19
2	2	4	13	3	5	8	3	5	8	3	5	8	24	3	5	8	3	5	8	3	5	8	24
3	7	10	18	5	5	13	3	7	10	4	9	13	36	5	2	7	3	5	8	5	2	7	22
5	10	15	35	3	10	13	3	10	13	5	10	15	41	5	3	8	5	1	6	5	10	15	29
2	2	4	20	2	3	5	2	3	5	2	3	5	16	2	3	5	3	2	5	2	2	4	14
5	5	10	22	3	5	8	3	10	13	5	5	10	31	5	2	7	3	2	5	5	2	7	19
3	5	8	20	3	6	9	3	5	8	5	10	15	32	4	3	7	3	2	5	5	2	7	19
5	5	10	22	3	5	8	3	10	13	5	10	15	36	5	1	6	3	2	5	5	2	7	18
3	5	8	22	5	5	10	3	6	9	5	8	13	32	5	2	7	3	2	5	4	5	9	21
3	7	10	27	3	8	11	4	8	12	4	8	12	36	5	5	14	5	5	14	4	4	8	36
3	3	6	21	3	3	6	3	5	8	5	3	8	22	5	2	7	3	2	5	5	1	6	18
3	5	8	19	3	5	8	3	6	9	4	7	11	28	5	2	7	3	1	4	4	7	11	22
5	5	10	21	5	10	15	3	10	13	5	10	15	43	5	2	7	3	2	5	5	1	6	18
5	5	10	24	3	5	8	3	5	8	3	5	8	24	3	7	10	3	1	4	3	8	11	25
3	4	7	31	3	6	9	4	4	8	4	6	10	27	4	7	11	3	8	11	5	2	7	25
3	7	10	31	3	6	9	5	5	10	4	7	11	30	4	4	8	5	10	15	4	9	13	36
3	5	8	15	3	5	8	3	5	8	4	5	9	25	4	2	6	3	2	5	4	7	11	22
2	2	4	16	3	3	6	3	3	6	3	5	8	20	4	5	9	3	3	6	2	2	4	19
3	8	11	30	3	5	8	3	7	10	4	7	11	28	5	2	7	3	3	6	2	2	4	17
5	10	15	34	5	10	15	3	10	13	5	10	15	43	6	3	8	5	10	15	5	10	15	38
3	5	8	21	5	5	10	5	7	12	5	10	15	37	5	10	15	3	5	8	5	10	15	38
3	8	11	31	5	7	12	5	8	13	5	6	11	36	5	5	11	4	2	6	5	10	15	32
5	5	10	22	3	5	8	3	10	13	5	10	15	36	4	2	6	3	2	5	5	2	7	18
2	2	4	13	2	2	4	3	10	13	5	10	15	32	5	1	6	3	5	8	5	3	8	22
1	2	3	7	3	5	8	3	8	8	4	4	8	24	4	5	9	3	2	5	5	1	6	20
5	10	15	31	5	10	15	5	10	15	5	10	15	46	6	3	7	5	2	7	5	10	15	29
3	3	6	20	5	6	13	4	7	11	4	5	9	33	3	5	8	4	5	9	3	2	5	22
3	5	8	30	3	5	8	3	5	8	4	8	12	28	5	7	12	4	8	12	4	9	13	37

APPENDIX: B3

PRESENTATION OF SCALE RESPONSES TO QUESTIONNAIRE PART THREE USING MICROSOFT EXCEL

Source: Osseo-Asare Jr., 2003

Id	1.1 students	1.2 students	1.3 staff	1.4 staff	1.5 staff	1.6 parents	1.7 local	1.8 HEFC	1.9 GAA	1.10 employers	1.11 tax	2.1 students	2.2 staff	2.3 staff	2.4 staff	2.5 parents	2.6 government	2.7 HEFC	2.8 employers	2.9 taxpayers	3.1 students	3.2 staff	3.3 parents	3.4 government	3.5 HEFC	3.6 employers	3.7 taxpayers	4 beneficiaries	5 partnerships	6 government	7.1 students	7.2 students	7.3 staff	7.4 staff
1	5	4	5	3	2	2	1	5	4	3	1	5	3	3	3	2	4	4	3	3	3	5	3	4	5	4	4	1	1	2	5	4	5	3
2	4	3	5	5	3	3	4	5	5	3	3	5	5	5	5	4	5	5	5	5	5	4	4	5	5	3	5	2	2	1	5	5	5	5
3	2	2	5	5	2	2	2	5	5	2	2	4	5	4	3	2	5	5	2	2	4	5	5	5	5	3	3	2	2	1	4	5	5	4
4	2	2	5	5	3	2	2	5	5	3	2	5	5	5	3	3	5	5	5	3	4	5	3	5	5	4	3	1	1	1	4	5	5	4
5	5	5	4	4	3	2	2	5	5	3	3	4	5	4	3	3	5	5	4	3	5	5	4	5	5	4	4	1	1	1	4	5	5	4
6	4	4	5	4	3	2	2	5	4	3	3	4	5	4	3	2	5	5	3	3	5	4	2	5	5	2	2	1	1	2	4	5	5	4
7	4	3	5	5	2	4	4	5	5	4	4	5	4	4	3	4	5	5	5	5	4	4	3	5	3	5	5	2	2	1	4	4	5	4
8	5	5	5	5	2	2	3	5	5	4	3	5	5	3	3	2	5	5	5	4	4	5	3	5	4	4	4	1	1	1	4	5	5	4
9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	2	5	5	5	5
10	2	2	5	4	2	2	2	5	5	5	3	3	5	4	3	2	5	5	3	3	4	5	3	5	5	3	3	1	1	1	3	5	5	3
11	5	5	5	5	4	3	3	5	5	3	2	5	5	4	3	2	5	5	2	2	4	5	5	5	5	4	4	1	1	1	4	5	5	4
12	5	4	5	4	3	2	3	5	5	3	2	4	5	4	3	2	5	5	3	2	5	5	4	5	5	4	4	1	1	1	4	5	5	4
13	3	2	5	4	2	1	2	5	5	3	3	4	5	4	3	2	5	5	4	3	3	4	3	5	5	4	3	1	1	2	5	5	5	3
14	4	3	5	5	3	2	2	5	5	3	4	5	5	5	3	2	5	5	4	3	4	5	4	5	5	5	5	2	1	3	4	5	5	4
15	5	5	5	5	4	4	3	5	5	3	2	5	5	5	4	3	5	5	3	2	5	5	3	5	5	3	2	1	1	1	5	5	5	5
16	2	3	5	4	2	2	1	5	2	4	2	5	5	3	2	4	5	4	5	5	5	5	3	5	5	5	5	2	1	1	5	5	5	4
17	3	3	5	4	3	2	2	5	4	2	2	4	5	4	3	2	5	5	3	3	4	5	3	5	5	3	3	1	1	2	4	5	5	3
18	2	2	5	2	2	2	2	5	5	3	2	4	5	3	2	2	5	5	3	3	5	5	3	5	5	3	2	2	2	1	3	5	5	3
19	3	2	5	2	2	2	2	5	5	4	4	5	5	5	3	2	5	4	4	3	4	5	2	5	5	5	4	1	1	3	4	5	5	4
20	5	4	5	5	4	3	3	5	5	5	5	5	5	5	4	2	5	5	5	4	5	5	5	5	5	5	5	1	1	1	5	5	5	5
21	5	4	5	4	3	2	2	5	5	2	2	5	5	5	3	2	5	5	2	2	5	5	4	5	5	4	4	2	2	1	3	5	5	3
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2	2	1	4	5	5	5
23	4	3	5	3	2	2	4	5	4	3	3	4	5	4	3	2	5	5	3	2	5	3	2	5	5	3	3	1	1	1	4	5	5	3
24	4	4	5	3	3	2	2	5	4	2	2	4	5	3	2	2	5	5	3	2	4	4	2	5	5	2	2	1	1	1	4	5	5	3
25	2	2	5	3	2	2	2	5	5	3	3	4	5	4	2	2	5	5	2	2	4	4	3	5	5	3	3	1	1	1	4	5	5	3
26	4	4	5	5	3	2	3	5	5	5	3	5	5	5	3	2	5	5	3	3	5	5	4	5	5	5	3	1	1	1	4	5	5	3
27	5	5	5	5	5	3	3	5	5	3	3	4	5	4	3	2	5	5	3	2	5	5	3	5	5	3	3	2	1	2	5	5	5	5
28	5	5	5	5	4	3	3	5	5	3	3	5	5	5	5	3	5	5	2	2	5	5	5	5	5	5	5	1	1	1	4	5	5	4
29	3	3	5	5	3	2	2	5	4	2	2	5	5	3	3	2	5	5	3	3	3	5	2	5	5	5	5	1	1	2	5	5	5	4
30	4	4	5	5	3	2	2	5	4	2	2	4	5	4	3	2	5	5	2	2	5	5	2	5	5	2	2	1	1	1	3	4	5	3
31	5	5	5	5	4	2	2	5	5	5	3	5	5	5	3	2	5	5	4	4	5	5	5	5	5	5	5	1	1	1	4	5	5	4
32	2	2	5	3	2	2	2	5	4	2	2	3	5	4	2	2	5	5	3	3	5	5	3	5	5	3	3	1	1	1	3	5	5	5
33	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	5	3	5	5	4	3	2	1	1	4	4	5	3
34	5	5	5	5	3	2	2	5	5	3	3	5	5	5	3	2	5	5	3	3	5	5	5	5	5	3	3	3	1	1	4	5	5	5
35	5	4	5	4	3	2	2	5	5	3	3	4	4	4	3	2	5	5	2	2	4	4	2	5	5	2	2	1	1	2	4	5	5	4
36	4	4	5	4	3	1	1	5	4	2	2	5	5	5	3	2	5	5	3	2	5	5	2	5	5	2	2	1	1	2	4	5	5	3
37	3	3	5	4	3	2	2	5	5	3	3	5	5	5	3	2	5	5	3	3	5	5	5	5	5	5	5	2	2	1	4	5	5	4
38	2	2	5	3	2	2	2	5	4	3	3	4	5	3	2	2	5	5	3	2	3	5	3	5	5	3	5	2	2	1	3	4	5	4
39	5	4	5	3	3	2	3	5	5	3	1	5	5	4	1	4	4	4	4	1	5	5	2	4	5	5	4	2	1	2	4	3	3	3
40	3	3	4	4	4	2	2	5	4	2	2	5	4	4	4	2	5	5	4	2	4	4	3	5	4	5	3	1	1	2	5	5	5	4
41	2	2	5	3	1	2	1	1	5	4	3	4	3	1	1	1	5	3	5	4	5	5	3	5	4	5	4	2	1	1	5	2	2	3
42	4	4	5	5	4	3	3	5	4	3	3	4	5	5	4	3	5	5	3	3	5	5	5	5	5	4	4	1	1	1	4	5	5	5

Appendix: B3 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Three Using Microsoft Excel

Source: Osseo-Asare Jr., 2003

7.5 staff	7.6 events	7.7 local	7.8 HEFC	7.9 QAA	7.10 employers	7.11 taxpayers	8.1 quality	8.2 delivery	9.1 quality	9.2 employers	9.3 rewards	9.4 environment	10.1 strategy	10.2 HRM	10.3 infrastructure	10.4 communication	10.5 partnerships	10.6 audit	10.7 RAE	10.8 TQA	10.9 standards	10.10 ratio	10.11 facilities	10.12 class	10.13 destinations	10.14 league	11.1 equal	11.2 economy	11.3 ethics	11.4 support	11.5 pollution	11.6 disclosure
3	1	1	3	4	1	1	4	2	3	4	3	1	3	4	4	3	2	5	5	4	5	5	4	5	4	2	5	4	5	1	3	1
5	3	3	5	5	4	4	5	5	5	5	4	5	5	5	5	5	4	4	5	5	5	5	5	5	5	4	5	5	4	4	3	3
3	2	2	5	5	2	2	5	5	5	3	2	2	2	3	4	5	4	4	5	5	5	3	4	5	5	4	4	3	5	3	2	4
3	2	2	5	5	4	3	5	5	5	5	3	3	2	3	4	5	3	4	4	4	5	5	5	5	5	3	4	3	5	3	3	4
3	2	2	5	4	3	3	4	4	5	5	3	2	4	4	5	5	3	5	5	5	5	4	4	5	5	4	5	5	5	4	3	3
3	2	2	5	5	3	3	5	5	5	5	3	2	3	3	4	4	4	3	5	5	5	5	5	5	5	5	5	3	5	2	2	2
3	2	2	4	4	3	2	5	5	5	5	3	3	2	3	5	5	4	5	5	5	5	4	4	5	5	3	5	4	5	3	3	3
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	2	5	3	5	3	3	3
2	2	2	5	5	2	2	5	4	4	4	2	2	3	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3	2	2	5	5	3	3	5	5	5	4	3	2	4	4	4	4	3	4	4	5	5	5	4	5	5	3	4	3	5	3	3	3
3	2	2	5	5	3	2	5	5	5	3	2	2	5	4	4	4	3	4	4	5	5	5	5	5	5	4	5	3	5	3	3	3
2	2	2	5	5	4	4	5	5	5	5	4	4	5	5	5	5	5	4	5	5	4	3	4	5	5	4	5	4	5	3	3	3
4	2	3	5	5	4	4	5	5	5	5	2	3	2	3	5	5	4	4	5	4	4	4	4	5	5	4	5	4	5	4	4	4
4	3	2	5	5	3	2	5	5	5	4	3	2	3	4	4	4	4	5	5	5	5	5	5	5	5	3	5	4	5	3	3	3
4	2	1	5	1	4	1	5	5	5	3	2	2	3	4	4	5	5	5	5	5	5	5	5	5	5	3	5	4	5	3	3	3
2	2	2	5	4	2	2	5	5	5	4	3	2	3	4	4	4	4	4	5	4	5	4	4	5	5	3	5	3	5	3	2	2
2	2	3	5	4	4	4	5	5	5	4	2	2	3	4	4	4	4	4	4	4	5	3	4	5	5	3	5	3	5	3	3	3
5	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2	5	4	5	3	2	2
2	2	2	5	5	2	2	5	5	5	3	2	2	3	4	4	5	4	5	5	5	5	5	5	5	5	4	5	3	5	3	3	3
3	2	2	5	5	3	2	5	4	5	3	2	2	3	4	4	4	4	4	5	4	5	4	4	5	5	3	5	3	5	3	2	2
3	2	2	5	4	4	4	5	5	5	5	2	2	3	4	4	4	4	4	4	4	5	3	4	5	5	3	5	3	5	2	2	2
2	1	2	5	4	2	2	5	4	4	3	2	2	3	4	4	4	4	5	4	3	5	4	4	4	4	4	5	3	5	2	2	2
2	2	2	5	4	3	2	5	3	5	3	2	2	3	3	4	3	3	3	5	4	4	3	4	5	5	3	4	2	5	2	2	2
3	2	3	5	5	4	4	5	5	5	5	3	3	4	5	4	5	4	3	4	5	5	5	5	5	5	4	5	5	5	4	3	3
3	2	2	5	5	3	2	5	5	5	5	3	2	2	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	3
3	2	2	5	5	3	3	5	5	5	4	3	3	5	4	4	4	4	4	5	5	5	5	5	5	5	2	4	3	5	3	3	2
3	2	2	5	4	2	2	5	4	5	5	4	3	4	4	4	4	3	4	4	5	5	4	4	4	4	5	2	5	3	5	2	2
3	2	2	5	4	2	2	5	5	5	3	2	2	4	4	4	4	3	3	3	5	5	5	5	5	5	5	4	3	5	3	3	3
4	3	4	5	5	5	4	4	4	5	4	5	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	4	3	5	2	2
2	2	2	5	4	2	2	5	4	5	5	2	2	2	3	4	4	4	4	4	5	4	4	4	4	4	3	5	4	5	3	3	3
4	2	2	5	5	3	2	5	4	5	5	4	3	3	4	4	4	3	4	5	5	5	4	5	5	5	2	5	4	5	3	3	3
3	3	3	5	5	3	3	5	5	5	3	2	2	4	4	4	5	5	5	4	5	5	4	4	5	5	2	4	3	5	2	2	2
3	2	2	5	4	2	1	5	4	5	4	3	2	4	4	4	4	3	4	5	5	4	4	4	5	5	3	5	3	5	2	2	2
3	2	2	5	5	3	3	5	5	5	5	4	3	5	4	4	3	3	3	4	4	5	3	4	5	5	2	4	2	5	2	2	2
3	2	2	5	4	2	4	5	5	5	5	5	5	3	3	4	5	5	5	5	5	5	5	6	5	5	2	5	4	5	2	2	2
3	1	2	2	5	3	1	5	4	5	4	2	2	3	3	4	5	4	4	5	5	5	5	5	5	5	4	5	3	5	3	3	3
4	2	2	5	5	3	2	4	4	5	4	2	1	4	4	3	4	3	6	3	5	3	4	3	3	3	3	3	2	3	2	1	1
4	4	2	2	4	5	4	5	4	5	3	4	2	2	3	3	3	3	3	5	5	3	3	4	3	3	3	2	4	2	5	2	1
5	3	3	5	5	4	4	4	3	5	5	3	3	5	5	5	4	3	4	4	4	5	5	4	5	6	3	5	3	5	3	2	2

APPENDIX: B4

PRESENTATION OF SCALE RESPONSES TO QUESTIONNAIRE PART FOUR USING MICROSOFT EXCEL

Source: Osseo-Asare Jr., 2003

	1	2	3	4	5		SAC.1			SAC.2			SAC.3			SAC.4			SAC.5			SAC.6	
Id	relevance	usefulness	link	standard	standard	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total
1	3	2	2	2	3	2	2	40	4	4	80	5	5	100	3	2	50	5	4	90	5	5	100
2	10	10	2	1	1	4	5	90	5	5	100	4	5	90	4	3	70	3	3	60	2	2	40
15	10	10	2	2	2	4	4	80	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100
16	7	5	2	2	2	5	4	90	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100
29	10	10	2	2	2	4	5	90	5	5	100	4	5	90	5	5	100	3	4	70	5	5	100
30	8	8	2	2	2	4	4	80	5	5	100	4	5	90	4	5	90	2	2	40	5	5	100
3	8	8	2	1	1	4	3	70	5	4	90	5	5	100	4	3	70	3	4	70	5	5	100
4	10	10	2	2	2	5	4	90	5	5	100	5	5	100	3	4	70	3	3	60	3	3	60
17	10	10	1	1	2	5	5	100	5	5	100	5	5	100	5	5	100	5	3	80	5	5	100
18	8	7	2	2	2	3	3	60	5	5	100	5	5	100	5	5	100	3	4	70	5	5	100
31	10	10	2	1	2	4	4	80	5	5	100	5	5	100	5	5	100	3	2	50	5	5	100
32	10	8	2	2	2	4	4	80	5	5	100	4	4	80	4	5	90	3	2	50	5	5	100
5	10	10	2	1	2	3	3	60	5	5	100	5	5	100	5	3	80	3	2	50	3	2	50
6	10	9	2	1	2	5	5	100	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100
19	9	9	2	2	2	4	4	80	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100
20	6	6	1	1	1	4	3	70	3	4	70	4	3	70	3	3	60	4	3	70	4	3	70
33	10	10	2	1	2	4	3	70	5	5	100	4	5	90	5	5	100	3	3	60	5	5	100
34	5	5	2	2	2	4	3	70	5	5	100	4	5	90	4	5	90	3	3	60	5	5	100
7	10	10	2	1	2	4	3	70	5	5	100	5	5	100	4	4	80	3	3	60	3	3	60
8	10	10	2	1	2	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	3	70
21	5	5	1	1	2	4	4	80	5	5	100	4	5	90	4	5	90	3	4	70	5	5	100
22	8	8	2	3	2	3	3	60	5	4	90	5	5	100	5	5	100	3	3	60	5	5	100
35	9	7	2	2	2	4	4	80	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100
36	8	5	2	1	2	3	3	60	5	5	100	4	5	90	4	5	90	2	2	40	5	5	100
9	10	5	2	1	1	4	4	80	5	4	90	5	4	90	4	4	80	3	2	50	2	2	40
10	9	9	2	2	2	5	5	100	5	5	100	5	5	100	4	4	80	4	3	70	5	5	100
23	10	9	2	1	2	5	4	90	5	5	100	5	5	100	4	5	90	3	4	70	5	5	100
24	10	10	2	3	2	5	4	90	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100
37	10	10	2	1	2	4	4	80	5	5	100	5	5	100	5	5	100	3	4	70	5	5	100
38	10	10	2	1	2	3	3	60	5	5	100	4	4	80	4	4	80	2	2	40	4	4	80
11	10	9	2	2	2	4	4	80	5	5	100	5	5	100	4	4	80	3	3	60	3	3	60
12	7	6	2	1	1	4	4	80	5	5	100	5	5	100	4	4	80	3	3	60	5	5	100
25	7	5	2	3	2	3	3	60	5	5	100	4	3	70	5	4	90	3	3	60	5	5	100
26	10	10	3	2	2	4	4	80	5	5	100	5	5	100	5	5	100	4	3	70	5	5	100
39	10	9	2	1	2	4	4	80	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100
40	10	10	2	2	2	5	5	100	5	5	100	5	5	100	5	5	100	2	4	60	5	4	90
13	7	5	2	1	2	4	3	70	5	5	100	4	5	90	4	5	90	3	3	60	5	5	100
14	10	8	1	1	2	4	3	70	5	4	90	5	5	100	4	4	80	3	3	60	5	5	100
27	7	3	1	3	3	2	1	30	3	1	40	3	3	60	5	5	100	3	4	70	3	3	60
28	10	10	2	1	2	4	3	70	5	5	100	4	5	90	4	5	90	2	2	40	5	5	100
41	10	10	1	2	3	1	4	80	4	3	70	5	3	80	5	5	100	2	2	40	3	3	60
42	10	9	2	1	2	4	4	80	5	5	100	4	5	90	4	5	90	3	3	60	5	5	100

Appendix: B4 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Four Using Microsoft Excel

Source: Osseo-Asare Jr., 2003

	SAC.7			SAC.8			SAC.9			SAC.10			SAC.11			SAC.12			SAC.13			SAC.14	
Importance	effectiveness	Total	Importance	effectiveness	total	Importance	effectiveness	Total	Importance	effectiveness	Total	Importance	effectiveness	Total	Importance	effectiveness	Total	Importance	effectiveness	Total	Importance	effectiveness	Total
3	3	60	2	2	40	2	2	40	2	2	40	4	4	80	4	4	80	1	1	20	1	1	20
2	2	40	2	2	40	2	2	40	2	2	40	2	2	40	5	5	100	3	3	60	5	1	60
3	3	60	3	2	50	3	3	60	5	5	100	4	3	70	5	5	100	5	5	100	5	5	100
4	4	80	4	4	80	4	4	80	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100
4	4	80	4	3	70	4	4	80	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100
2	2	40	2	2	40	2	2	40	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
2	2	40	5	5	100	4	2	60	5	3	80	5	3	80	5	5	100	5	5	100	5	3	80
2	2	40	4	4	80	3	3	60	5	4	90	5	5	100	5	5	100	5	5	100	3	2	50
5	3	80	5	3	80	5	3	80	5	5	100	5	4	90	5	5	100	5	5	100	5	5	100
3	2	50	3	2	50	3	3	60	5	5	100	4	3	70	5	5	100	5	5	100	5	5	100
3	2	50	3	2	50	3	2	50	5	5	100	5	4	90	5	5	100	5	5	100	5	5	100
3	2	50	3	2	50	3	3	60	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
2	2	40	3	2	50	2	2	40	3	3	60	4	4	80	5	5	100	5	5	100	5	2	70
4	3	70	3	3	60	4	4	80	4	4	80	4	3	70	5	5	100	5	5	100	4	3	70
3	3	60	3	3	60	3	3	60	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
2	1	30	3	3	60	4	3	70	4	4	80	4	3	70	5	5	100	5	5	100	4	3	70
3	2	50	3	2	50	3	2	50	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
3	2	50	3	2	50	3	2	50	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
2	2	40	3	2	50	2	2	40	4	4	80	4	3	70	5	5	100	5	5	100	5	5	100
3	2	50	3	3	60	4	3	70	5	5	100	5	4	90	5	5	100	5	5	100	5	5	100
2	3	50	3	3	60	3	3	60	5	5	100	4	4	80	5	5	100	4	5	90	4	3	70
3	3	60	3	4	70	3	4	70	5	4	90	4	4	80	5	5	100	5	5	100	5	5	100
3	3	60	3	3	60	3	3	60	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
2	2	40	2	2	40	2	2	40	5	5	100	4	3	70	5	5	100	3	5	80	4	4	80
2	2	40	2	2	40	3	3	60	5	5	100	5	4	90	5	5	100	5	3	80	5	4	90
3	2	50	3	3	60	3	3	60	5	5	100	5	4	90	5	5	100	5	5	100	5	5	100
3	3	60	3	3	60	3	3	60	5	5	100	5	4	90	5	5	100	5	5	100	4	4	80
3	3	60	3	3	60	3	3	60	5	5	100	4	4	80	5	5	100	5	5	100	5	5	100
2	2	40	2	2	40	3	3	60	4	4	80	4	4	80	5	5	100	5	5	100	5	5	100
2	2	40	2	2	40	3	3	60	5	4	90	3	4	70	4	5	90	4	5	90	4	4	80
2	2	40	3	2	50	3	3	60	5	5	100	5	5	100	5	5	100	5	5	100	4	3	70
2	2	40	3	3	60	3	3	60	4	4	80	4	4	80	5	5	100	5	5	100	4	4	80
2	2	40	2	2	40	3	3	60	5	5	100	4	4	80	5	5	100	5	5	100	3	3	60
3	3	60	3	3	60	3	3	60	4	5	90	4	3	70	5	5	100	5	5	100	5	5	100
3	3	60	3	3	60	3	3	60	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100
2	1	30	3	1	40	3	2	50	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100
2	2	40	2	2	40	3	3	60	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100
2	2	40	2	2	40	2	3	60	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100
3	2	50	3	3	60	2	2	40	1	1	20	5	4	90	5	5	100	5	5	100	5	5	100
3	2	50	2	2	40	2	2	40	5	5	100	5	4	90	2	2	40	4	1	50	5	3	80
1	1	20	5	4	90	2	2	40	1	3	40	1	1	20	3	2	50	1	3	40	1	4	50
3	2	50	2	2	40	2	2	40	5	4	90	4	4	80	5	5	100	5	5	100	5	5	100

Appendix: B4 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Four Using Microsoft Excel

Source: Osseo-Asare Jr., 2003

&AC.15			&AC.16			&AC.17			&AC.18			&AC.19			&AC.20			&AD.1			&AD.2		
importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total
3	3	60	3	3	60	1	1	20	3	3	60	1	1	20	3	3	60	3	3	60	3	3	60
5	2	70	5	4	90	4	4	80	5	5	100	5	5	100	5	5	100	5	5	100	5	4	90
5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100	3	3	60	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100	3	4	70
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	5	90	3	5	80
5	5	100	5	5	100	4	5	90	4	5	90	3	3	60	5	5	100	3	2	50	3	2	50
4	3	70	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	3	70	4	4	80
4	1	50	4	4	80	4	4	80	5	5	100	3	3	60	5	5	100	4	3	70	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	4	80	3	4	70
5	5	100	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100	3	4	70	3	4	70
5	5	100	5	5	100	5	5	100	5	5	100	4	3	70	5	5	100	5	4	90	4	3	70
5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100	4	3	70	3	4	70
4	2	60	4	2	60	4	4	80	5	5	100	5	4	90	5	5	100	3	2	50	3	2	50
4	3	70	4	4	80	4	4	80	5	5	100	4	3	70	5	5	100	5	5	100	5	5	100
4	4	80	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100	4	3	70	3	3	60
2	2	40	4	4	80	4	5	90	5	5	100	3	2	50	5	5	100	3	3	60	3	2	50
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	3	2	50	3	2	50
5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100	3	3	60	4	4	80
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100	3	3	60	4	4	80
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	4	5	80	5	5	100	4	3	70	3	3	60
4	4	80	5	3	80	4	4	80	4	5	90	3	3	60	5	5	100	4	3	70	3	4	70
5	5	100	5	4	90	5	5	100	5	5	100	3	3	60	5	4	90	3	3	60	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	4	4	80	5	5	100	3	4	70	4	4	80
4	4	80	5	4	90	5	3	80	4	5	90	3	3	60	5	5	100	4	5	90	3	3	60
5	4	90	5	5	100	4	4	80	5	5	100	4	4	80	5	5	100	3	3	60	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	3	3	60	5	5	100	4	4	80	3	3	60
4	3	70	4	3	70	5	5	100	5	4	90	4	4	80	5	5	100	3	3	60	3	3	60
5	5	100	5	5	100	5	4	90	5	5	100	3	4	70	5	5	100	4	3	70	3	3	60
5	4	90	5	5	100	5	4	90	5	5	100	3	3	60	5	5	100	4	5	90	3	3	60
4	4	80	4	5	90	4	4	80	4	4	80	4	4	80	5	5	100	3	4	70	3	3	60
4	4	80	5	5	100	5	4	90	5	5	100	5	3	80	5	5	100	4	4	80	4	4	80
4	4	80	5	5	100	4	4	80	5	5	100	3	3	60	5	5	100	4	4	80	4	4	80
3	3	60	4	4	80	5	4	80	5	5	100	3	3	60	5	5	100	4	4	80	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	4	80	3	4	70
5	5	100	5	5	100	5	4	90	4	4	80	5	3	80	5	5	100	4	4	80	3	3	60
5	5	100	5	5	100	5	5	100	5	5	100	3	2	50	5	5	100	3	3	60	4	3	70
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	3	70	3	4	70
5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	5	5	100	4	3	70	4	3	70
5	2	70	5	4	90	2	2	40	3	3	60	4	2	60	5	2	70	3	2	50	3	2	50
4	4	80	5	4	90	5	5	100	5	5	100	3	3	60	5	5	100	4	4	80	3	3	60
1	4	50	1	3	40	1	3	40	3	3	60	2	4	60	3	3	60	1	4	50	1	3	40
5	5	100	4	5	90	5	5	100	5	5	100	4	4	80	5	5	100	3	3	60	4	4	80

Appendix: B4 - CONTINUE

Presentation of Scaled Responses to Questionnaire Part Four Using Microsoft Excel

Source: Osseo-Asare Jr., 2003

&AD.3			&AD.4			&AD.5		
Importance	effectiveness	Total	importance	effectiveness	Total	importance	effectiveness	Total
3	3	60	3	3	60	3	3	60
5	4	90	4	4	80	4	4	80
3	3	60	3	3	60	3	3	60
4	4	80	4	4	80	4	4	80
3	5	80	4	3	70	4	3	70
3	3	60	3	3	60	2	3	50
5	4	90	3	2	50	3	3	60
3	3	60	3	3	60	2	2	40
3	4	70	3	4	70	3	4	70
4	5	90	2	3	50	2	2	40
5	4	90	4	3	70	4	3	70
4	4	80	4	4	80	4	4	80
4	4	80	4	4	80	3	2	50
3	3	60	3	2	50	3	3	60
4	4	80	4	4	80	3	3	60
4	2	60	3	3	60	3	3	60
3	3	60	2	3	50	2	3	50
3	3	60	2	2	40	2	2	40
3	3	60	4	3	70	4	4	80
4	4	80	4	3	70	3	2	50
3	3	60	3	3	60	3	3	60
3	4	70	4	4	80	5	5	100
3	3	60	4	3	70	3	3	60
3	3	60	4	3	70	3	2	50
4	3	70	2	3	50	3	3	60
3	3	60	3	3	60	3	2	50
3	3	60	3	3	60	2	2	40
4	4	80	4	4	80	3	3	60
3	3	60	3	3	60	4	3	70
3	3	60	4	3	70	3	3	60
4	4	80	2	2	40	3	3	60
4	5	90	4	4	80	3	3	60
3	3	60	4	3	70	4	3	70
3	3	60	3	3	60	3	3	60
4	4	80	3	3	60	2	3	50
4	4	80	3	3	60	2	2	40
3	3	60	3	2	50	2	2	40
5	4	90	3	2	50	5	2	70
4	4	80	3	4	70	3	3	60
2	3	50	1	1	20	1	2	30
4	4	80	3	3	60	3	3	60

APPENDIX: B5

PRESENTATION OF SCALE RESPONSES TO QUESTIONNAIRE PART FIVE USING MICROSOFT EXCEL

Source: Osseo-Asare Jr., 2003

	1		2		3	4	5	6	7	
id	areas	possible	feasible	%total	Critical Success Factors	ranking	premise	Critical Success Factors	structure	HEIs
1	1	5	4	45	2	2	2	3	3	oxbridge
2	5	10	8	90	1	3	2	4	4	oxbridge
15	5	6	6	60	1	3	1	5	4	oxbridge
16	5	9	7	80	1	2	2	4	2	oxbridge
29	5	10	6	80	1	3	1	6	5	oxbridge
30	5	10	7	85	1	3	1	5	4	oxbridge
3	5	5	5	50	1	2	2	4	3	london
4	5	10	5	75	1	3	1	3	2	london
17	5	10	7	85	1	3	1	5	5	london
18	5	8	6	70	1	3	2	5	6	london
31	5	8	8	80	1	3	1	7	4	london
32	5	8	7	75	1	2	2	6	4	london
5	5	8	5	65	1	2	2	3	3	civics
6	5	10	6	80	1	1	1	3	4	civics
19	5	10	8	90	1	3	2	9	6	civics
20	5	5	5	50	2	3	5	4	4	civics
33	5	10	10	100	1	3	2	6	5	civics
34	5	10	7	85	1	1	1	7	8	civics
7	5	6	5	55	1	2	2	3	2	redbrick
8	5	10	8	90	1	3	1	3	5	redbrick
21	5	6	5	55	1	3	1	6	3	redbrick
22	5	8	6	70	1	3	1	7	4	redbrick
35	5	8	8	80	1	3	1	6	6	redbrick
36	5	7	6	65	1	2	2	8	8	redbrick
9	5	5	5	50	1	2	2	4	3	plateglass
10	5	9	8	85	1	3	1	3	3	plateglass
23	5	10	10	100	1	3	2	8	3	plateglass
24	5	9	8	85	1	1	1	8	7	plateglass
37	5	8	7	75	1	2	2	8	4	plateglass
38	5	8	8	80	1	3	1	6	4	plateglass
11	5	8	8	80	2	3	1	4	2	technology
12	5	6	5	55	1	1	2	5	3	technology
25	5	7	6	65	1	3	2	5	3	technology
26	5	7	7	70	1	3	2	8	4	technology
39	5	10	10	100	1	1	1	6	4	technology
40	5	8	7	75	1	2	2	8	9	technology
13	5	7	5	60	1	2	2	5	5	polytechnic
14	5	10	5	75	1	2	2	6	5	polytechnic
27	5	10	4	70	1	3	1	4	4	polytechnic
28	5	10	10	100	1	3	2	6	3	polytechnic
41	5	10	5	75	1	3	1	3	3	polytechnic
42	5	10	8	90	1	3	1	7	4	polytechnic

APPENDIX: B6

PRESENTATION OF INTERVIEW TRANSCRIPTS

Source: Osseo-Asare Jr. 2003

Sample Transcript of Semi-Structured Expert Interviews in the United Kingdom

Prepared By

Doctoral Research Interviewer

A. Ernest Osseo-Asare Jr.

2000 - 2003

TRANSCRIPTION OF SEMI-STRUCTURED INTERVIEWS

SEMI-STRUCTURED RESEARCH INTERVIEW TRANSCRIPT

WITH

UK Interviewee #4

A Professor in Quality Management Policy and Strategy Post-1992 HEI

BY

Doctoral Research Interviewer

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Unit of Analysis	QUESTIONS AND RESPONSES	Inductive Analysis

THEME #1
IMPACT OF SELF-ASSESSMENT ON AUTONOMY

BROAD QUESTION: B1
In your view how has Self-assessment methodology impacted on Autonomy and Accountability in Higher Education?

I'm trying to think of the extent to which Self-assessment does work within Higher Education now. It is true that within Teaching the QAA process demands and begins with forms of Self-assessment, which are then used by the assessors as the datum-base on which the assessment can proceed. In terms of the way the QAA process has impacted on Teachers in Higher Education, the 'self-assessment' process does work in Higher Education to a large extent along the 'self-assessment' guidelines provided by the QAA. In terms of how the 'self-assessment' process impacts on teachers in higher education. I would say, the 'self-assessment' process does require teachers to think more carefully about the content and development of the curriculum and also about the need to work together as a team in 'curriculum' more than they did before. Refer to my colleague Mary Henkels' Book on 'Academic Identities'. She is clearly the UK expert in this area.

In Research, essentially, the Research Assessment Exercise (RAE) process is an external self-assessment process, which encourages and compels research active staff to work together in order to raise the RAE score. Before a cost-unit or cost-centre puts itself for RAE grading it has to think carefully about what it can best offer, and also put itself together in order to successfully go through the assessment exercise. I regard the RAE Methodology as a strong externalist. Taking the QAA's TQA exercise and HEFCE's RAE exercise, I have no doubt that the two together have reduce the 'autonomy' of higher education institutions. I think 'autonomy' has been reduced in two ways, first, the way in which institutions have to render to external agencies. Universities are now seriously constrained by the QAA in the determination of their own curriculum and methods. They are now not able to entirely express themselves academically. Second, institutions are now more visible and now have to give account of themselves to the institutional authorities and external agencies, as part of the 'accountability' agenda. Accountability has become much sharper and more public through publication of reports on their performance. Now academics are more visible and have to give an account of themselves to the university authorities in ways they did not have to in the past.

Specific Question: S1
Do you see universities integrating 'internal' and 'external' methods of assessment?

Well, I can speak in particularly about my own university i.e. Brunel University. Most certainly, at Brunel there is emphasis on the necessity to comply with external assessment requirements. For example, Brunel's internal assessment processes are able to comply with QAA's and HEFCE's requirements for Teaching and Research quality improvement respectively.

Specific Question: S2
How well have you managed the conflict of objectives between meeting 'internal' and 'external' requirements for quality improvement?

Yes there are conflicts of interests and objectives. A lot of what external agencies want institutions to do these institutions might already be doing them anyway. For example, Benchmarking. My colleagues object to it in principle, but if they were required to state it in their curriculum they do include some of the benefits of Benchmarking. Institutions ought to be able to tell the QAA and HEFCE, 'this is what we are doing, please judge us by these set of criteria'. Certainly, the obvious thing is 'economic instrumentalism' demanded by the QAA to meet employment needs. Some of my colleague professors deeply object to it, and do not wish to take a hard managerialist line. The need to meet external requirements for quality improvements tends to restrict what can be accomplished internally. Sometimes the QAA simply lays down precepts which institutions have to follow whether the institution likes it or not. The precepts are not only about the quality of the curriculum, the quality of teaching and the quality of the transmission of knowledge, but also about 'employability' of graduates – the need to prepare students for future employment. We do have to prioritise, and make decisions on how to efficiently allocate our scare resources in the areas of Teaching and Research.

THEME #2
IMPACT OF THE QAA ON APPROACHES TO QUALITY ASSURANCE

BROAD QUESTION: B2
In your opinion has the QAA's Methodology delivered 'real' Quality Improvement in UK Higher education Institutions?

First of all I have to say that in higher education there is a problem with standards, and probably very reactionary one. I do not believe that many universities left to themselves would be producing good degree level instruction, because the quality is poor. I have been teaching for many years, and I can say Brunel is not a very esteem University in terms of teaching and research quality, and the standard of awards. The quality of students coming into Brunel for first degrees is low, and those coming to do their masters degrees with what looks like a good degree to my mind is really not what it seems to be. It is perhaps the case with the enormous expansion of the HE system and growth in student numbers over the years to nearly a million. The number of courses being offered have also grown in number. As a consequence, there is bound to be lowing of standards, therefore the need for self-evaluation of the standards themselves. On way or the other there has to be a strong external quality assurance systems to monitor quality and standards in higher education. However, whether this has worked or not, I cannot be sure. I suspect two things might have happened. First, the worst part of the system are required to get better so they can make a dissent showing to the QAA. Second, there has been a lot of productive time, effort and resource lost to implementing the QAA methodology. There are some UK HEIs who could have been good without having to follow the QAA methodology. This is purely my own opinion. The point arising from Mary Henkel's research is that Quality Improvement methodology does require academic groups to assess carefully whether the curriculum is strong, and whether their mode of transmission are suitable suitable for their student groups. In principle it introduces degrees of conformity to presentational qualities rather than substantial qualities.

Specific Question: S1
Would you say that without external supervision institutions would in the long run fail in their effort to improve quality?

Well, yes, some institutions would in the long run fail if they fall below the minimum level of quality. The QAA intervention and the methodology they use have enforced a minimum level of quality throughout the system of higher education in the UK. Institutions object to QAA methodology in terms of the conformity imposed, the diversion of effort of academics, who could be carrying out research or teaching, and the enhanced bureaucratisation within the institution. Bureaucratisation through central administration has become more powerful at the expense of academics.

THEME #3
CRITICAL SUCCESS FACTORS FOR SUSTAINABILITY

BROAD QUESTION: B3
What in your opinion are some of the Critical Success Factors for achieving and sustaining improved Quality and Performance in Higher Education?

First of all, the recruitment of able people, with strong preparation to teach and research in a particular subject area. Second, stronger induction into teaching and research is required. It is important senior academics take full responsibility over the induction, support and mentoring of young academics. So it is about preparation and orientation, and obviously about the general condition of work of academics. Staff-Turnover ratios are far too high to sustain high teaching and research quality. I think there is a lot to worry about, the way in particular in which junior academics have to strain hard to meet the QAA quality improvement requirements, and at the same time get resources in-time to carry out research. It is a multiple task to be a university teacher - teaching, researching, administrating, and carrying out community activities, and looking after students as young people who should get strong pastoral care, which we used to give a great deal of at Brunel but now it has become more and more difficult.

Specific Question: S1
Does that suggest that a Teacher ought to be Research-active?

Not necessary, given the expansion of the HE system, and it is virtually impossible for all teachers to become research active. Besides there is a distinction between 'research' and 'scholarship'. Research is the discovery of new facts and concepts, whereas, Scholarship is reordering research. Some of the best people in social sciences have been 'scholars' rather than 'researchers', for example, Daniel Bell and Thomas Cooke have not done research, but only do strong critical analysis of what have already been down by others, and reordering the research intellectually. All teachers in higher education must either be in 'research' or in 'scholarship'. Scholarship is what 'classical-dones' used to do. Academic teachers should at least be in scholarship - completely conversant with the subject area and making critical review of relevant areas – instead of going from one text book to another. That is not my idea of the purpose of Higher Education.

THEME #4
INTEGRATING ACADEMIC AND ADMINISTRATIVE QUALITY

BROAD QUESTION: B4
In your view is it 'possible' and 'feasible' to integrate academic quality and administrative quality?

'Academic quality' should not be at the expense of 'administrative quality'. I have written a book on the 'interface between academics and administrators' which would help you understand the issues involved. If you take the organisation of a university, traditionally, it has had a vice chancellor and two lines of authority. On one side are the academics: the vice chancellor, deans, heads of departments, professors and the rest of the academic staff. The parallel of authority is between the vice chancellor, registrar and administrators. Two things have happened, the first is that some of the functions of the university have come under new groups, that are concerned with quality assurance issues, internationalisation, equality policies, issues which are not traditionally taken up by the vice chancellor, deans and heads of departments. This has created 'an interface' a 'contra academic force or grouping' with often powerful influence over what academics do. It is a powerful grouping that lies between 'academics' and 'administrators'. That is one thing, the second point is that, many of the roles taken up by those in the 'interface' are staff roles in organisational language, and not academic management roles as taken by heads of departments. Many of these roles are not actually filled by academics who take on the administrative institutional role, as opposed to straight academic management role as the head of department has. It is a phenomenon not only in Britain but also in Scandinavia (see article by Carlsen), and in the USA (see article by David Day). So there is a diachotomy between 'academic' and 'administrators' in many of the institutional management issues have been taken over by academics or former academics and some non-academics within the 'interface'. A further point is that the academic-side of the system is itself at the 'opposite'. When a group of academics come together to invent a curriculum it has to become formalised and legalised based on subject, to faculty, to university degree committee. In this way the process, is no longer made up of individual intellectual or academics thinking free, but a formalised, bureaucratized system. This bureaucratization is assisted and structured by the administrators, and requires everyone to conform to lay down procedures. The integration of academic and administrative functions and quality is therefore 'possible' and 'feasible'. I might say administrative considerations are now much stronger than they used to be because of QAA requirements, and because of the danger of legal action by aggrieved students, because of health and safety regulation. Some of the 'administrators' might be former 'academics', so there is integration of administration - which is after all a way of expressing academic decision-making in a formalised form.

Specific Question: S1
Do you think 'academics' are good at management?

Some are, many are not. Many vice chancellors are not very good, and I am not impressed by many of them. Academics who become 'administrators' or 'managers' either do not know what to do or simply do not care.

THEME #5
FUNDING POLICY AND STRATEGY

BROAD QUESTION: B5
In the very long-run do you see the present policy of 'cuts in funding' changing to 'increase in funding' and for what reasons?

I can see any prospects of any real increase in funding to higher education. One will have to recorn with the fact that funding is now very uneven. The benefits of the Research Assessment Exercise (RAE) means some possibly do get some increase in funding, but the system generally has suffered 40% reduction in funding over the last two years. I can see any good reason why one should expect any increase in funding.

Specific Question: S1
To what extent would the lack of funding constrain the ability of higher education to implement quality improvement strategies?

There is a paradox, first of all the QAA would say it has greatly improved quality through conformity, and that institutions now have the infrastructure to deliver the minimum level of quality improvement on continuous basis. Consequently, there is now no need to increase funding indefinitely. Second, increase competition within the industry detects that institutions should diversify their sources of funding in order to become independent from central government with regards to operational matters. Today it is easy to get a first class or 2.1 in my days we work hard to achieve that. There are now many higher education institutions offering high quality degrees to a much wider section of the community, as part of government agenda to widen participation. The politicians would therefore argue that they is now no need to increase funding to higher education, the sector should be able to take care of itself. This is a highly debatable issue. There is indeed a deliberate government policy to force universities to diversify their sources of funding. To me the criteria is what life is for a lecturer with children without a car and a house.

THEME #6
STAKEHOLDERS IN HIGHER EDUCATION

BROAD QUESTION: B5
In your own opinion which group of Stakeholders can best be described as Customers in terms of ability to pay?

It must be the student body whether they pay or not, because primarily, I think the Higher Education system is there to meet the needs and expectations of students. Both fee-paying and non-fee paying students can put pressure of academics to improve the quality of teaching through regular participation in evaluation programmes. Industry, business, government, community and employers are also key stakeholders who can exert pressure on academics to improve academic quality. There has been an enormous change in the pressure each stakeholder can exert on higher education quality and performance.

Specific Question: S1
What do you think should be the mission of UK Higher Education?

This is a very good question. I think the mission of higher education should be redefined to bring it in line with changes in the socio-economic, political and technological environment. From a highly theoretical point of view, one ought to ask if we need a higher education system that is enduring irrespective of which political party is in power, and in any economic distress. And should higher education become untouchable? From the eccentric point of view, higher education is about the search for truth, the application of critical thinking to both the natural world and social world, the induction of the next generation into the skills needed for society top produce new knowledge, to ensure a good civil society. All of these things are still part of the traditional mandate of higher education. That kind of agenda or mission I do not think even reactionary governments will try to push to one side. In Britain there is support for top theoretical excellence in the humanities, including Classics, History, English studies, at the same they are promoting excellence in social initiatives. There is a parallel agenda or mission, which is socially and economically led which is about more inclusiveness, where before, Traditional Higher Education had been exclusive and selective, creating an 'elite'. This makes it more difficult to define 'higher education' compared with the definition of 'further education'. The two agenda are in conflict, and today's institutions need to achieve a fine balance between the two agenda, to help them focus on their strategic direction.

END OF TRANSCRIPTION OF AUDIO-RECORDED INTERVIEW
12.00NOON - 2.00PM, ANGEL, LONDON.
THURSDAY 23 MAY 2002

A. ERNEST OSSEO-ASARE JR.
25 SEPTEMBER 2002
DERBY

APPENDIX: C1

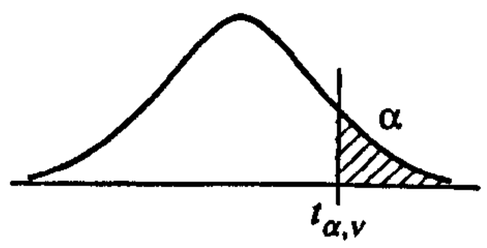
t-distribution Table for Hypothesis Testing

Source: Morris (1996:461), Malhotra and Birks (2000:710)

Note

For this Research Study, the alpha value is $\alpha = 0.05$;
For a two-tail test; and degrees of freedom $\nu = (n - 2) = 40$

The tabulation is for one tail only, i.e. for positive values of *t*.
For two-tail tests, the column headings must be doubled.



$\alpha =$	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
$\nu =$ 1	3.078	6.314	12.706	31.821	63.657	318.31	636.62
2	1.886	2.920	4.303	6.965	9.925	22.326	31.598
3	1.638	2.353	3.182	4.541	5.841	10.213	12.924
4	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	1.319	1.714	2.069	2.500	2.807	3.485	3.767
24	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	1.310	1.697	2.042	2.457	2.750	3.385	3.646
40	1.303	1.684	2.021	2.423	2.704	3.307	3.551
60	1.296	1.671	2.000	2.390	2.660	3.232	3.460
120	1.289	1.658	1.980	2.358	2.617	3.160	3.373
∞	1.282	1.645	1.960	2.326	2.576	3.090	3.291

APPENDIX: C2

Calculation of Test Statistics for Hypothesis Testing

Source: Osseo-Asare Jr. 2003

C2a - LEADERSHIP PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
1	79	71	20.5	29.5	604.75	420.25	870.25
2	90	26	31.5	-15.5	-488.25	-992.25	240.25
3	48	38	-10.5	-3.5	36.75	110.25	12.25
4	17	31	-41.5	-10.5	435.75	1722.25	110.25
SUM	**234**	**166**	**-**	**-**	**589**	**3245**	**1233**

$\bar{i} = 234/4 = 58.5$ $\bar{e} = 166/4 = 41.5$

$\sum (i - \bar{i})(e - \bar{e}) = 589$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{3245} = 56.94$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{1233} = 35.11$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{589}{56.94 \times 35.11} = 589 \div 1999.16 = +0.295 \cong \text{Zero}$$

$r^2 = (0.295)^2 = 0.087$

$$\text{t-calculated} = r \times \frac{\sqrt{n-2}}{\sqrt{1 - r^2}} = 0.295 \times \frac{\sqrt{42-2}}{\sqrt{1 - 0.087}} = 0.295 \times \frac{\sqrt{40}}{\sqrt{0.913}}$$

where n = 42 respondents

t-calculated = $0.295 \times (6.3245 \div 0.9555) = 0.295 \times 6.6190 = 1.9526$

C2b - POLICY AND STRATEGY PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
5	52	31	-17.7	5	-88.5	313.29	25
6	95	2	25.3	-24	-607.2	640.09	576
7	62	45	-7.7	19	-146.3	59.29	361
SUM	**209**	**78**	**-**	**-**	**-842**	**1012.67**	**962**

$\bar{i} = 209/3 = 69.7$ $\bar{e} = 78/3 = 26$

$\sum (i - \bar{i})(e - \bar{e}) = -842$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{1012.67} = 31.82$

$$\sqrt{\sum (e - \bar{e})^2} = \sqrt{962} = 31.02$$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{-842}{31.82 \times 31.02} = -842 \div 987.06 = -0.853$$

$$r^2 = (-0.853)^2 = 0.728$$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = -0.853 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.728}} = -0.853 \times \frac{\sqrt{40}}{\sqrt{0.272}}$$

where n = 42 respondents

t-calculated = -0.853 × (6.3245 ÷ 0.5215) = - 0.853 × 12.1275 = 10.3448 *(absolute value)*

C2c - STAFF MANAGEMENT PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
8	62	5	-8.7	0.3	-2.61	75.69	0.09
9	64	7	-6.7	2.3	-15.41	44.89	5.29
10	86	2	15.3	-2.7	-41.31	234.09	7.29
SUM	**212**	**14**	-	-	**-59.33**	**354.67**	**12.67**

$\bar{i} = 212/3 = 70.7$ $\bar{e} = 14/3 = 4.7$

$\sum (i - \bar{i})(e - \bar{e}) = -59.33$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{354.67} = 18.83$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{12.67} = 3.56$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{-59.33}{18.83 \times 3.56} = -59.33 \div 67.03 = - 0.885$$

$$r^2 = (-0.885)^2 = 0.783$$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = -0.885 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.783}} = -0.885 \times \frac{\sqrt{40}}{\sqrt{0.217}}$$

where n = 42 respondents

t-calculated = -0.885 × (6.3245 ÷ 0.4658) = -0.885 × 13.5777 = 12.0162 *(absolute value)*

C2d - RESOURCES AND PARTNERSHIP PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
11	55	7	-13.3	-16.7	222.11	176.89	278.89
12	74	14	5.7	-9.7	-55.29	-32.49	94.09
13	76	50	7.7	26.3	202.51	59.29	691.69
SUM	**205**	**71**	**-**	**-**	**369.33**	**268.67**	**1064.67**

$\bar{i} = 205/3 = 68.3$ $\bar{e} = 71/3 = 23.7$

$\sum (i - \bar{i})(e - \bar{e}) = 369.33$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{268.67} = 16.39$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{1064.67} = 32.63$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{369.33}{16.39 \times 32.63} = 369.33 \div 534.81 = +0.691$$

$r^2 = (0.691)^2 = 0.477$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = 0.691 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.477}} = 0.691 \times \frac{\sqrt{40}}{\sqrt{0.523}}$$

where n = 42 respondents

t-calculated = $0.691 \times (6.3245 \div 0.7234) = 0.691 \times 8.7427 = 6.0412$

C2e - PROCESSES PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
14	74	10	-1.7	-0.3	0.51	2.89	0.09
15	67	10	-8.7	-0.3	2.61	75.69	0.09
16	86	11	10.3	0.7	7.21	106.09	0.49
SUM	**227**	**31**	**-**	**-**	**10.33**	**184.67**	**0.67**

$\bar{i} = 227/3 = 75.7$ $\bar{e} = 31/3 = 10.3$

$\sum (i - \bar{i})(e - \bar{e}) = 10.33$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{184.67} = 13.59$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{0.67} = 0.82$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{10.33}{13.59 \times 0.82} = 10.33 \div 11.14 = +0.927$$

$r^2 = (0.927)^2 = 0.859$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = 0.927 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.859}} = 0.927 \times \frac{\sqrt{40}}{\sqrt{0.141}}$$

where n = 42 respondents

t-calculated = 0.927 × (6.3245 ÷ 0.3755) = 0.927 × 16.8429 = 15.6134

C2f - STUDENT RESULTS PRACTICES

QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
17	79	20	26.3	0	0	691.69	0
18	24	30	-28.7	10	-287	823.69	100
19	55	10	2.3	-10	-23	5.29	100
SUM	**158**	**60**	**-**	**-**	**-310**	**1520.67**	**200**

$\bar{i} = 158/3 = 52.7$ $\bar{e} = 60/3 = 20$

$\sum (i - \bar{i})(e - \bar{e}) = -310$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{1520.67} = 39$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{200} = 14.14$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{-310}{39 \times 14.14} = -310 \div 551.46 = -0.562$$

$r^2 = (-0.562)^2 = 0.316$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = -0.562 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.316}} = -0.562 \times \frac{\sqrt{40}}{\sqrt{0.684}}$$

where n = 42 respondents

t-calculated = -0.562 × (6.3245 ÷ 0.8270) = -0.562 × 7.6475 = 4.2979 (absolute value)

C2g - STAFF RESULTS PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
20	12	5	-16	-5.3	84.8	256	28.09
21	55	10	27	-0.3	-8.1	729	0.09
22	17	16	-11	5.7	-62.7	121	32.49
SUM	**84**	**31**	**-**	**-**	**14**	**1106**	**60.67**

$\bar{i} = 84/3 = 28$ $\bar{e} = 31/3 = 10.3$

$\sum (i - \bar{i})(e - \bar{e}) = 14$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{1106} = 33.26$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{60.67} = 7.79$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{14}{33.26 \times 7.79} = 14 \div 259.1 = +0.054 \cong \text{Zero}$$

$r^2 = (0.054)^2 = 0.003 \cong \text{ZERO}$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = 0.054 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.003}} = 0.054 \times \frac{\sqrt{40}}{\sqrt{0.997}}$$

where n = 42 respondents

t-calculated = 0.054 × (6.3245 ÷ 0.9985) = 0.054 × 6.3340 = 0.3420

C2h - SOCIETY RESULTS PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
23	21	21	-16.3	-14	228.2	265.69	196
24	17	39	-20.3	4	81.2	412.09	16
25	74	45	36.7	10	367	1346.89	100
SUM	**112**	**105**	**-**	**-**	**676.4**	**2024.67**	**312**

$\bar{i} = 112/3 = 37.3$ $\bar{e} = 105/3 = 35$

$\sum (i - \bar{i})(e - \bar{e}) = 676.4$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{2024.67} = 45$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{312} = 17.66$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{676.4}{45 \times 17.66} = 676.4 \div 794.7 = +0.851$$

$r^2 = (0.851)^2 = 0.724$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = 0.851 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.724}} = 0.851 \times \frac{\sqrt{40}}{\sqrt{0.276}}$$

where n = 42 respondents

t-calculated = 0.851 × (6.3245 ÷ 0.5254) = 0.851 × 12.0375 = 10.2439

C2i - INSTITUTIONAL RESULTS PRACTICES							
QN	i	e	$(i - \bar{i})$	$(e - \bar{e})$	$(i - \bar{i})(e - \bar{e})$	$(i - \bar{i})^2$	$(e - \bar{e})^2$
26	86	5	25.7	-7	-179.9	660.49	49
27	24	10	-36.3	-2	72.6	1317.69	4
28	71	21	10.7	9	96.3	114.49	81
SUM	**181**	**36**	**-**	**-**	**-11**	**2092.67**	**134**

$\bar{i} = 181/3 = 60.3$ $\bar{e} = 36/3 = 12$

$\sum (i - \bar{i})(e - \bar{e}) = -11$

$\sqrt{\sum (i - \bar{i})^2} = \sqrt{2092.67} = 45.75$

$\sqrt{\sum (e - \bar{e})^2} = \sqrt{134} = 11.58$

$$r = \frac{\sum (i - \bar{i})(e - \bar{e})}{\sqrt{\sum (i - \bar{i})^2} \times \sqrt{\sum (e - \bar{e})^2}} = \frac{-11}{45.75 \times 11.58} = -11 \div 529.79 = -0.021 \cong \text{Zero}$$

$r^2 = (-0.021)^2 = 0.0004 \cong \text{ZERO}$

$$\text{t-calculated} = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}} = -0.021 \times \frac{\sqrt{42 - 2}}{\sqrt{1 - 0.0004}} = -0.021 \times \frac{\sqrt{40}}{\sqrt{1}}$$

where n = 42 respondents

t-calculated = -0.021 × (6.3245 ÷ 1) = -0.021 × 6.3245 = 0.1328 (absolute value)

APPENDIX: C3

POOL OF PRIMARY AND SECONDARY CRITICAL SUCCESS FACTORS

Source: Osseo-Asare Jr., 2003

Appendix: C3a

28 Best Quality Management Practices[1] Associated with the 'nine' EFQM Model Criteria

Source: Based on Literature Review, Expert Opinion, Initial Exploratory Research

1. MISSION, VISSION, VALUES, PRINCIPLES:
   [Leadership Practice #1, Questionnaire Part Two, Question #1, QN = 1]

2. COMMUNICATION INFRASTRUCTURE:
   [Leadership Practice #2, Questionnaire Part Two, Question #2, QN = 2]

3. STAFF EMPOWERMENT, MOTIVATION AND LEADERSHIP
   [Leadership Practice #3, Questionnaire Part Two, Question #, QN = 3]

4. STAFF SUPPORT, ENCOURAGEMENT AND REWARD
   [Leadership Practice #4, Questionnaire Part Two, Question #4, QN = 4]

5. POLICY, STRATEGY, OBJECTIVES, TARGETS
   [Policy and Strategy Practice #1, Questionnaire Part Two, Question #5, QN = 5]

6. PROCESS OWNERSHIP AND IMPROVEMENT
   [Policy and Strategy Practice #2, Questionnaire Part Two, Question #6, QN = 6]

7. INFORMATION, INTELLIGENCE, KNOWLEDGE
   [Policy and Strategy Practice #3, Questionnaire Part Two, Question #7, QN = 7]

8. Staff Performance, Policy and Strategy
   [Staff Management Practice #1, Questionnaire Part Two, Question #8, QN = 8]

9. STAFF EMPOWERMENT, LEADERSHIP
   [Staff Management Practice #2, Questionnaire Part Two, Question #9, QN = 9]

10. STAFF SUPPORT, MOTIVATION, REWARDS
    [Staff Management Practice #3, Questionnaire Part Two, Question #10, QN = 10]

11. CREATING AND SUSTAINING SYNERGIES
    [Resources & Partnership Practice #1, Questionnaire Part Two, Question #11, QN = 11]

12. DIVERSIFICATION OF SOURCES OF FUNDING
    [Resources and Partnership Practice #2, Questionnaire Part Two, Question #12, QN = 12]

13. ACQUISITION, ALLOCATION, UTILISATION OF FUNDS
    [Resources and Partnership Practice #3, Questionnaire Part Two, Question #13, QN = 13]

14. MAINTAINING A FRAMEWORK OF CORE PROCESSES
    [Processes Practice #1, Questionnaire Part Two, Question #14, QN = 14]

15. PROCESS OWNERSHIP FOR IMPROVEMENT
    [Processes Practice #2, Questionnaire Part Two, Question #15, QN = 15]

16. SUSTAINING CONTINUOUS PROCESS IMPROVEMENT
    [Processes Practice #3, Questionnaire Part Two, Question #16, QN = 16]

17. MONITORING AND ADDRESSING STUDENTS' COMPLIANTS
    [Students Results Practice #1, Questionnaire Part Two, Question #17, QN = 17]

18. STUDENTS' SATISFACTION AND DELIGHT
    [Students' Results Practice #2, Questionnaire Part Two, Question #18, QN = 18]

19. INCORPORATING STUDENTS' RESULTS INTO IMPROVEMENTS
    [Students Results Practice #3, Questionnaire Part Two, Question #19, QN = 19]

20. IMPLEMENTING EQUAL OPPORTUNITY
    [Staff Results Practice #1, Questionnaire Part Two, Question #20, QN = 20]

21. STAFF INVOLVEMENT

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[1] *Each of the '28' Practices was derived from the literature, expert opinion, and initial exploratory research. For example Practices 1, 2, 3, 4 are 'leadership' practices essentially derived from the sub-criteria under the EFQM 'leadership' criterion.*

[Staff Results Practice #2, Questionnaire Part Two, Question #21, QN = 21]

22. STAFF PERFORMANCE-REWARD SYSTEMS
[Staff Results Practice #3, Questionnaire Part Two, Question #22, QN = 22]

23. ENVIRONMENTAL, HEALTH AND SAFETY CONCERNS
[Society Results Practice #1, Questionnaire Part Two, Question #23, QN = 23]

24. IMPACT ON LOCAL AND NATIONAL ECONOMY
[Society Results Practice #2, Questionnaire Part Two, Question #24, QN = 24]

25. ETHICAL BEHAVIOUR
[Society Results Practice #3, Questionnaire Part Two, Question #25, QN = 25]

26. BALANCED BUDGET
[Institutional Results Practice #1, Questionnaire Part Two, Question #26, QN = 26]

27. STAFF-STUDENT RATIO
[Institutional Results Practice #2, Questionnaire Part Two, Question #27, QN = 27]

28. SUSTAINING FUNDING INCREASES
[Institutional Results Practice #3, Questionnaire Part Two, Question #28, QN = 28]

NOTE

Appendix C3a shows how literature review, expert opinion, and initial exploratory research led to the generation of a 'pool' of '28' critical success factors (CSFs). They represent 'primary' critical success factors (CSFs) in the hierarchy of CSFs developed for this doctoral research study. This 'pool' of primary CSFs formed the basis for designing the 28 research questions under Questionnaire Part Two, and selection of Research Interview Themes and Questions.

The number '28' was pre-determined from the 'sub-criteria' under the '9' EFQM 'enabler' and 'results' 'main' criteria[2] – on average '3' primary CSFs were derived from each EFQM 'main' criterion. More detail is provided under Chapter Two on Research Methodology.

The 64 CSFs in Appendix C3b below represent 'secondary' CSFs derived from the 28 'primary' CSFs above using data and information from the 'Documentary Evidence of Practice' obtained from respondents and interviewees.

[2] *EFQM '9' 'Main' Criteria: '5' ENABLER Criteria: (1) leadership, (2) policy and strategy, (3) people management, (4) partnership and resources, (5) processes. '4' RESULTS Criteria: (6) Customer Results, (7) People Results, (8) Society Results, (9) Key Performance Results*

Appendix: C3b

POOL OF 64 SECONDARY CRITICAL SUCCESS FACTORS IN UK HEIs

Source: Based on the 'Nine' Models in Chapter Ten (Osseo-Asare Jr. 2003)

CODING SYSTEM: *Each CSF below represents a 'secondary' CSF in the sense that it is linked to one of the 28 'primary' CSFs in Appendix A1 above. For example, the first CSF on the list below is: Mission; the 'first' 'digit' in the code [1.1] i.e. '1' shows it is linked to the first CSF listed in Appendix A1; the second 'digit' i.e. '1' shows it represents a secondary CSF under 'leadership' as the 'primary' CSF.*

1. **Mission [1.1]**
2. **Vision [1.2]**
3. **Values [1.3]**
4. **Principles [1.4]**
5. **Internal Infrastructure [2.1]**
6. **External Infrastructure [2.2]**
7. **Staff Empowerment [3.1]**
8. **Staff Motivation [3.2]**
9. **Staff Support [4.1]**
10. **Staff Encouragement [4.2]**
11. **Staff Rewards [4.3]**
12. **Policy [5.1]**
13. **Strategy [5.2]**
14. **Objectives and/or Targets [5.3]**
15. **Ownership of Processes [6.1]**
16. **Improvement of Processes [6.2]**
17. **Data [7.1]**
18. **Information [7.2]**
19. **Intelligence [7.3]**
20. **Knowledge [7.4]**
21. **Policy and Strategy [8.1]**
22. **Performance [8.2]**
23. **Empowerment [9.1]**
24. **Leadership [9.2]**
25. **Support [10.1]**
26. **Motivation [10.2]**
27. **Rewards [10.3]**
28. **Creating Synergies [11.1]**
29. **Sustaining Synergies [11.2]**
30. **Areas of Weakness Needing Funding [12.1]**
31. **Sources of Funding [12.2]**
32. **Acquisition of Funds [13.1]**
33. **Allocation of Funds [13.2]**
34. **Utilisation of Funds [13.3]**
35. **Identifying and Selecting Core Processes [14.1]**
36. **Maintaining the Framework of Core Processes [14.2]**
37. **Job Descriptions [15.1]**
38. **Recognition and Rewards [15.2]**
39. **Continuity of Improvements [16.1]**
40. **Sustainability of Continuity [16.2]**
41. **Regulations and Procedures [17.1]**
42. **Complaints, Appeals and Offences [17.2]**
43. **Satisfaction Surveys [18.1]**
44. **Delight Surveys [18.2]**
45. **Feedback Methodologies [19.1]**
46. **Improvement Policy and Strategy Formulation [19.2]**
47. **Discrimination [20.1]**
48. **Participation [20.2]**
49. **Decision Making Processes [21.1]**
50. **Level of Involvement [21.2]**
51. **Performance Appraisal Systems [22.1]**
52. **Linkage Between Performance and Reward [22.2]**
53. **Environmental Concerns [23.1]**
54. **Health and Safety [23.2]**
55. **Social Re-engineering [24.1]**
56. **Economic Regeneration [24.2]**
57. **Professionalism [25.1]**
58. **Intellectual Capital [25.2]**
59. **Teaching Budget and Teaching Assessment Results [26.1]**
60. **Research Budget and Research Assessment Results [26.2]**
61. **Staff Motivation [27.1]**
62. **Students Learning Experience [27.2]**
63. **Liquidity Problems [28.1]**
64. **Investment in Teaching and Research Infrastructure [28.2]**

APPENDIX: C4

POOL OF WEAK, GOOD, BEST PRACTICES EXTRACTED FROM SEMI-STRUCTURED INTERVIEW TRANSCRIPTS

Source: Osseo-Asare Jr. 2003

Row	WEAK PRACTICES	GOOD PRACTICES	BEST PRACTICES
1	JB.13. Encouraging a 'culture of compliance', and doing things because the QAA wants things done in a certain way.	JB.1. Using Quality Assurance System as a catalyst to bring about Institutional Change.	JB.3. Carrying out a complete documentation of the Quality Assurance System in place, in booklets, websites, etc.
2	JB.14. Not monitoring the objectives of the things the QAA wants done at both subject and institutional levels	JB.2. Using Quality Assurance System as a tool for gaining and sustaining competitive advantage, through external recognition for excellence in Teaching, Research and Service.	JB.23. Recognizing that the needs and expectations of some stakeholders is 'short-term' others have 'long-term' needs and expectations. Both objectives are not mutually exclusive they need to be achieved simultaneously.
3	JB.15. Not doing the things QAA wants done voluntarily	JB.4. Implementing Quality Assurance Systems at micro and macro levels, i.e. subject and programme, department and school, school and university respectively. A cascade effect.	JB.34. Developing attitudes and values to go with new systems of quality management instead of being reactive and over-dependent on old approaches to quality management.
4	JB.18. Allowing self-assessment at the macro-level to become a managerial and bureaucratic costly exercise.	JB.5. Conducting internal self-assessment voluntarily using methodologies developed externally such as: The European University Association (EUA) model, European Quality Improvement Systems (EQUIS), European Foundation for Quality Management (EFQM) model, Malcolm Baldrige National Quality Award (MBNQA) model, Deming Prize, etc.	JB.37. Making an attempt at self-assessing everything in every area: Teaching and Learning, Research, Scholarship, Administration, Support-services, Impact on Society, the Environment, Social Responsibility, Student services, the IT infra-structure, the Library, etc
5	JB.19. Not linking quality assessment at the micro-level with quality management at micro and macro levels	JB.6. Conducting compulsory self-assessment using QAA's, HEFCE's, and Professional Bodies' models for Teaching, Learning, Research and Service Excellence.	JB.39. Top management taking practical steps to address any potential imbalance that might occur in future.
6	JB.21. The objectives of conducting a TQA and RAE self-assessment are short-term, and not linked to strategic quality management objectives at both micro and macro levels.	JB.7. Providing a forum for Academic Staff to communicate their grievances about Teaching.	JB.40. Adopting a holistic approach by ensuring that Teaching quality assessment, Research quality assessment and quality assessment in other areas are integrated in order to maximise the use of scarce resources through effectiveness and efficiency

7	JB.22. Pre-occupation with quality 'assessment' instead of real quality 'improvement' and strategic 'management' of quality.	JB.8. Successfully conducting Teaching Quality Assessment using QAA's self-assessment methodology and achieving over 20 out of 24 score.	JB.41. Identifying the needs and expectations of a wide range of stakeholders to ensure that the drive to meet these needs and expectations is sustained.
8	JB.24. Not knowing which set of Performance Indicators to agree on implementing.	JB.9. Successfully conducting Research Assessment Exercises using the HEFCE self-assessment methodology and achieving 3 and above.	JB.48. Having knowledge of a range of stakeholders with a range of needs and expectations is a useful starting point for quality improvement strategy formulation
9	JB.27. Apart from a few HE managers, most academics and administrators do not take quality management terminology seriously.	JB.10. Successfully conducting self-assessment using methodology provided by Professional Bodies and renewing accreditation.	JB.49. Using knowledge of the needs and expectations of a wide range of stakeholders to turn an inward-looking, self-obsessed academic culture into a sensitive, vibrant, proactive culture responsive to changes in the external environment, helping to sustain a culture for excellence.
10	JB.28. Quality management approaches are not effectively implemented. Most academics involved in the implementation process tend to see the process as a bureaucratic irritation that should be dealt with, with the least effort rather than as a mechanism for change.	JB.11. Placing Teaching higher on the agenda	JB.51. Some academics argue that a sustainable academic excellence model should comprise of elements of multiple stakeholders and autonomy i.e. institutional competition.
11	JB.29. Teaching Unit Planning are based mostly on revising figures upwards and not on accurate predictions - because the planners are not very sure whether the quality management issues involved are relevant or not.	JB 12. Using QAA's 'codes of practice' on the things the QAA wants assured as a directive to be implemented.	JB.52. Helping academic and administrative staff to understand quality management concepts and practice, by providing them with relevant information, knowledge, through education and training
12	JB.33. Holding on to the perception that unless you have the QAA or HEFCE telling you to do some specific things, then there is no need to do them.	JB.16. Having a centralised Committee that has oversight over Academic Quality and Standards, commonly called the Academic Quality and Standards Committee.	JB.53. Strengthening staff commitment to quality improvement by increased involvement and participation in the quality management decision-making processes.
13	JB.36. Allowing the whole self-assessment exercise to become an incredibly artificial exercise by allowing areas of assessment to stand-alone.	JB.17. Sustaining the interest in and the benefits derived from successful implementation of self-assessment at disciplinary level.	JB.54. Developing a sensitive quality management team

14	JB.42. Finding the concept of delighting students as consumers difficult to understand and to put into practice.	JB.20. Quality assessment at the micro-level is market-driven and aimed at satisfying the short-term needs and expectations of some stakeholders.	JB.55. Encouraging implementation of the concept of management by exception.
15	JB.43. Finding it difficult to handle the shift from 'production' orientation to 'consumer' orientation.	JB.25. Having in place a Peer Review process.	JB.56. Implementing a formal system for monitoring results of various quality improvement initiatives to help prepare a Quality Action Plan.
16	JB.45. Most academics see academic autonomy and freedom as supreme and not students as consumers, and do not like to share this freedom with other stakeholders.	JB.26 Disciplinary culture is central to how academics, administrators and support-service staff see themselves.	JB.58. Having in place the infra-structure for information and communication
17	JB 46. Most academics do not agree that students should have much say, and resist external quality assessment regimes.	JB.30 Developing an own version of QAA's Subjective Review methodology evaluated and accepted by the QAA	JB 60 Quality improvement decisions are based on relevant data and information.
18	JB.47. Most academics believe academic freedom strengthens autonomy and weakens accountability to stakeholders	JB.31. Well advanced in developing own model for sustaining quality improvement, through critical evaluation of existing models.	JB.61. Gaining Top management commitment and support from the Academic Board or Senate level on leadership and broad issues of policy and strategy for sustaining quality improvement.
19	JB.50. Some academics argue that a Multiple Stakeholder Model actually strengthens academic autonomy, others argue a dominant state or freedom of the marketplace represented by multiple stakeholders weakens academic autonomy.	JB.32. Gaining a lot of experience in HE management and recognizing the importance of both internal and external quality assessment.	JB.62. Having in place a workable formal or in-formal model for sustaining quality.
20	JB.57. Top Management over-reacting and getting themselves directly involved in observing Teaching sessions as part of the QAA's TQA exercise.	JB.35. Achieving quality improvement by hiring the best staff, getting rid of those who are useless, and shouting at those who are not getting anything done, to get something done.	JB.63. Using quality management terminology appropriate for UK higher education sector.
21	KH.8	JB.38.	JB 64.

	Not knowing exactly what RAE Test Criteria are. The processes for meeting test criteria are not well documented.	Recognizing how one factor e g policy or activity in one area impacts on another.	Effectively integrating various types of Reviews into an integrated review in order to add value to individual Review process.
22	KH.20 **Not having a clear definition of bad, good and best practices for achieving and sustaining quality improvement.**	JB.44. Operating on the premise that best degrees come from a lot of hard work from students, and not from the least possible effort.	JB.65. Using the strengths from institutional and school level audit processes to achieve synergy.
23	KH.21 Not having in place a well documented process of moving from bad practice to good practice and to best practice.	JB.59. Having an effective administrative and support-service in complete support for Teaching and Learning and Research.	JB.66. Looking periodically at every issue by conducting an Institutional Review to help staff take quality management more seriously.
24	KH.58 Not appreciating the highly selective nature of each Excellence rating.	KH.3 Having in place a Process for Peer Review Evaluation as one of the criteria for Testing Teaching Excellence.	JB.67. Having the ability to cope with the various types of Reviews cost-effectively
25	KH.59 Motivated by the need to be seen to be politically correct in the implementation of excellence models.	KH.4 **Having in place a Process for Peer Review Evaluation as one of the criteria for Testing Research Excellence.**	JB.68. The Review Process itself is frequently evaluated as part of a Quality Action Plan to make it perform better
26	KH.60 Not appreciating that individual excellence models are not a panacea and that they will fail if they lack committee and support to make them work.	KH.6 Having in place well documented procedures based on a set of criteria for Testing Research Excellence.	KH.1 *Having in place well documented procedures based on a set of criteria for Testing Research Excellence.*
27	KH.62 Not appreciating that academic culture of individualism, autonomy and freedom encourages resistance to self-assessment at both micro and macro levels of the institution.	KH.11 Using after-the-event Student Satisfaction Surveys as basis for improving the Quality of Student Learning Experience.	KH.2 The internal procedure for Testing Research Excellence meets the requirements of External requirements for improving research quality e g. HEFCE's RAE Test.
28	MK.2 Inability to prevent the QAA Self-assessment methodology from greatly reducing staff autonomy	KH.12 Student Satisfaction Surveys are conducted at subject and programme level and occasionally at school or university level.	KH.5 The type of Research being carried out is specifically defined and forms the basis for selecting appropriate criteria for testing research excellence e g pure-applied research spectrum
29	MK.8 Force fitting QAA Guidelines to internal assessment processes to a large extent has worked in UK Higher Education	KH.22 Defining good and best practices as good and best experiences and developments	KH.7 Using the pure-applied research spectrum as basis for identifying sources of research funding for RAE and non-RAE rated research projects.

30	MK.13 **Inability to effectively manage the negative impact of QAA and HEFCE Self-assessment methodologies on the 'autonomy' of higher education institutions**	KH.23 Defining good and best practice management as how to spread good and best practices throughout the whole organization.	KH.9 Non-RAE Test criteria well defined and having in place a documented process for meeting the test criteria.
31	MK.14 Inability of UK HEIs to use their internal audit process to meet the requirements of external agencies without incurring additional cost	KH.24 Increasing investment in innovation and creativity in teaching and learning methods.	KH.10 Using the Quality of Student Learning Experience as one of the criterion for Testing Teaching Excellence.
32	MK.15 Many UK HEIs are now seriously constrained by the QAA/HEFCE in the determination of their own curriculum and research agenda.	KH.29 *Funding for the Resource-based Learning is internally generated as part of the bidding process.*	KH 13 A mixture of informal and formal processes of gathering feedback from students form part of the system for evaluating the level of student satisfaction.
33	MK.16 Most UK HEIs are now not able to entirely express themselves academically following adaptation of the QAA/HEFCE Models for Self-assessment	KH.48 Teaching staff are assumed to be at the same level regardless of academic qualification – status is irrelevant.	KH.14 Subject Leaders conduct formal and informal interviews with potential lecturers as part of the recruitment process.
34	MK.21 Many UK HEIs are not able to successfully manage the conflicts of interests and objectives between internal and external requirements for quality improvement	KH.49 In a Subject Team, lecturer and senior lecturers work as lecturers putting aside status.	KH.15 Potential subject lecturers are asked to demonstrate their teaching and learning skills as part of the appointment process.
35	MK.25 Some UK academics object to QAA's 'economic instrumentalism' aimed at meeting employment needs, and do not wish to take a 'hard line' on 'managerialism'.	KH.50 When delivering a subject unit, lecturers adopt a status free approach.	KH.16 As part of the induction process, teachers are given time to build a relationship with sets of students as a way to give them confidence, autonomy and freedom.
36	MK.26 The need to meet external requirements for quality improvements tends to restrict what can be accomplished internally	KH.61 Recognizing that dealing with multiple diagnostic tools in an environment of limited resources is extremely time consuming and requires commitment and support.	KH.17 Decline in face-to-face contact has led to increase in student support using new technology.
37	MK.27 Sometimes the QAA simply lays down precepts which institutions have to follow whether the institution likes it or not.	MK.1 **Full Implementation of QAA Self-assessment methodology to evaluate Teaching Quality**	KH.18 Achieving the right balance between teacher-student-technology required to sustain quality improvement in teaching.
38	MK.30	MK 9	KH 19

	Many UK HEIs still have a problem with standards, and probably very reactionary one.	HEFCE Self-assessment Methodology for Research Quality has been fully implemented in UK Higher Education	Recognising the importance of identifying the many dimensions of the test of teaching excellence.
39	MK.31 Many UK HEIs left to themselves will not be able to produce good degree level instruction, because the quality is poor.	MK.12 The RAE Self-assessment process makes cost-centres think carefully about what they can best offer before putting themselves together for the exercise	KH.25 Introducing an institution-wide Language Scheme for implementing institutional change and improvement.
40	MK.32 **Some UK HEIs are not very esteem University in terms of teaching and research quality, and the standard of awards. The quality of students entering for first degrees is low, and those registering to do their masters degrees with what looks like a good degree to my mind is really not what it seems to be.**	MK.19 Academics in UK HEIs are more visible and have to give an account of themselves to their institutional authorities in ways they did not have to in the past	KH.26 Top management able to sort out the capital required for successful implementation of improvement projects.
41	MK.33 **Inability of internal delivery systems to cope with the enormous expansion of the HE system and growth in student numbers over the years to nearly a million.**	MK.23 Some academics in UK HEIs object to Benchmarking but still include the benefits in the curriculum for the benefits of external agencies	KH.27 Recognising that changes in Teaching and Learning processes means old practices need to be replaced by new practices.
42	MK.34 **Inability to effectively manage the large number of courses being offered, and as a consequence, standards are falling, therefore the need for self-evaluation of the standards themselves.**	MK.58 **Most UK HEIs are organised along a traditional line. They have a vice chancellor and two lines of authority. On one side are the academics: the vice chancellor, deans, heads of departments, professors and the rest of the academic staff. On the other side are the, registrars and administrators.**	KH.28 Moving towards Resource-based Learning to establish accessible learning materials where students are able to go and practice and develop themselves with guidance.
43	MK.35 Some UK HEIs are not very sure whether the QAA and HEFCE as strong external quality assurance systems for monitoring quality and standards have really worked.	MK.59 **In most UK HEIs some of the functions of the university have come under new groups, that are concerned with quality assurance issues, internationalisation, equality policies, issues which are not traditionally taken up by the vice chancellor, deans and heads of departments.**	KH.30 Having in place a group of academic and administrative staff having the time and resource to maintain and improve quality of teaching and learning.
44	MK.36 The UK Government requires the worst part of the HE system to get better so they can make a dissent showing to the QAA and RAE. However, despite all the effort and support from the government, there has been a lot of productive time, effort and resources lost to implementing the QAA and HEFCE methodology.	MK.60 **The organisational structure in most UK HEIs over time has created 'an interface' a 'contra academic force or grouping' with often powerful influence over what academics do. It is a powerful grouping that lies between 'academics' and 'administrators'.**	KH.31 Having in place a formal approach to Project Implementation.

45	MK.38 **Adopting Quality Improvement methodologies which require academic groups to assess carefully whether the curriculum is strong, and whether their mode of transmission are suitable for their student groups. In principle they introduce degrees of conformity to presentational qualities rather than substantial qualities.**	MK.61 **In most UK HEIs, many of the roles taken up by those in the 'interface' are staff roles in organisational language, and not academic management roles as taken by heads of departments.**	KH.32 Creating many Strategic Business Units (SBUs) and integrating them under one SBU based on commonalities – finance, language, public policy, international business etc.
46	MK.39 **Some UK HEIs recognise that their institutions would in the long run fail if they fall below QAA and HEFCE's minimum level of quality.**	MK.62 In most UK HEIs, many of the 'interface' roles are actually filled by academics who take on administrative roles, as opposed to straight academic management role as the head of department has. The 'interface' roles have therefore been taken over by academics or former academics and some non-academics	KH.33 Appointing Teaching and Learning Co-ordinator (TLCs) for each SBU.
47	MK.41 **Institutions object to QAA and HEFCE methodologies in terms of the conformity imposed, the diversion of effort of academics, who could be carrying out research or teaching, and the enhanced bureaucratisation within the institution.**	MK.63 **In most UK HEIs there is a diachotomy between 'academic' and 'administrators' in many of the institutional management areas.**	KH.34 *Teaching and Learning Co-ordinators play a leadership role in their SBU relating to Teaching and Learning practices and work with academic staff.*
48	MK.42 **In most UK HEIs bureaucratisation through central administration has become more powerful at the expense of academics.**	MK.64 **In most UK HEIs the academic-side of the system is itself at the 'opposite'. When a group of academics come together to invent a curriculum it has to become formalised and legalised based on subject, to faculty, to university degree committee.**	*KH.35* *Teaching and Learning Co-ordinators help to formulate their school's teaching and learning policy and assessment strategy.*
49	MK.46 Some UK HEIs stress the importance of preparation and orientation, only a few HEIs however are concerned about the general condition of work of academics.	MK.65 In most UK HEIs, the process for curriculum improvement, is no longer made up of individual intellectuals or academics thinking free, but a formalised, bureaucratized system. This bureaucratization is assisted and structured by the administrators, and requires everyone to conform to lay down procedures. The integration of academic and administrative functions and quality is therefore 'possible' and 'feasible'	*KH.36* *Teaching and Learning Co-ordinators are also responsible for costing their units.*
50	MK.47 In most UK HEIs, Staff-Turnover ratios are far too high to sustain high teaching and research quality	MK.66 **In many UK HEIs, because of QAA and HEFCE intervention, administrative considerations are now much stronger than they used to be. They is also the added pressure of the danger of legal action by aggrieved students, because of health and safety regulation.**	*KH.37* *Teaching and Learning Co-ordinators also look after the bidding for and receiving funding for improving the quality of teaching and learning.*

51	MK.48 In many UK HEIs most junior academics have to strain hard to meet the QAA quality improvement requirements, and at the same time get resources in-time to carry out research	MK.77 **There is a paradox, first of all the QAA would say it has greatly improved quality through conformity, and that institutions now have the infrastructure to deliver the minimum level of quality improvement on continuous basis. Consequently, there is now no need to increase funding indefinitely.**	*KH.38* Teaching and Learning Co-ordinators work as a group/team.
52	MK.49 Most UK HEIs see Teaching, Research, Administration and support-services as multiple tasks, which are difficult to integrate.	MK.78 **Most post-1992 HEIs are today making it easier for students with low entry standards to get a first class or 2.1 with very little effort. This is hardly the case in most pre-1992 HEIs.**	KH.39 Teaching and Learning Co-ordinators speed up the process for Teaching Quality Assessment, thereby ensuring higher QAA scores.
53	MK.50 Most UK HEIs are finding it difficult to effectively manage the multiple tasks of teaching, researching, administrating, carrying out community activities, and looking after students as young people who should get strong pastoral care	MK.79 **There are now many higher education institutions offering high quality degrees to a much wider section of the community, as part of government agenda to widen participation.**	KH 40 Teaching and Learning Co-ordinators were organically developed to achieve long-term objectives in line with the school's mission of becoming a centre for excellence in business practices and professional development.
54	MK.51 **In most UK HEIs, the expansion of the HE system, has virtually made it impossible for many teachers to become research active, or even participate in 'scholarly' activities i.e. reordering research.**	MK.80 Most UK politicians are arguing that they is now no need to increase funding to higher education, the sector should be able to take care of itself, as a matter of policy and strategy.	KH 41 The structure on which the Teaching and Learning Co-ordinators operate is an integrated student-centered structure designed to meet both internal and external need for quality improvement in the area of Teaching and Learning.
55	MK.53 In most post-1992 HEIs, majority of academic staff are 'teachers', some are in 'scholarship', with very few carrying out 'research'.	MK.81 **There is indeed a deliberate government policy to force universities to diversify their sources of funding.**	KH.42 The Process of Strategy Formulation and Implementation for improving the Quality of Teaching is well developed and documented and relates to initiatives and the roles individuals are expected to play to make the improvement projects successful.
56	MK.55 Many UK HEIs see the benefits in integrating Academic, Administrative and Support-service Quality even if they do not know how to go about it.	AN.2. Making academic resourcing part of top quality manager's responsibilities	KH 43 *Subject Unit Leaders as managers work with Subject Groups to spread Good and Best Practices.*
57	MK.56 In most UK HEIs 'Academic quality' is at the expense of 'administrative quality' and 'support-service quality'	AN.19. The requirements of the QAA, HEFCE and Professional Bodies have forced institutions to put in place clear quality improvement procedures.	KH 44 *Subject Group Leadership takes the form of a Committee or Team.*
58	MK.57	AN 21.	KH.45

	Very few UK HEIs recognise the 'interface between academics and administrators' and its role in quality management.	Making Subjective Review and integral part of the new procedure for Institutional Review.	*Subject unit leaders are the critical players upholding Academic Standards.*
59	MK.68 In many UK HEIs, only few Academic Staff can act as effective Quality Managers or Administrators.	AN.23. Considering a proposal to integrate Internal Management Performance Review processes with External Institutional Review Processes.	*KH.46* *Subject unit leaders by requirement are expected to act as external examiners in other institutions, and be members of a Professional Body and be active in their Subject Associations.*
60	**MK.69** **In many UK HEIs most Academics who become 'administrators' or 'managers' either do not know what to do or simply do not care.**	AN.23. **Considering a proposal to integrate Internal Management Performance Review processes with External Institutional Review Processes.**	*KH.47* *Individual teachers are the critical players upholding the Quality of Students' Learning Experience as front-line staff in direct contact with students most of the time.*
61	MK.70 Many vice chancellors in majority of UK HEIs are not very good, and I am not impressed by many of them.	AN.24. ***Basing Institutional Review on survey of staff and students to find out their opinions on different areas of services within their institution.***	KH.51 Capability Policy Implementation is well documented.
62	MK.72 Majority of the vice chancellors in UK HEIs cannot see any prospects of any real increase in funding to higher education in the foreseeable future.	Ali.7. The objective of pursuing excellence in Teaching is to attract more students and increase funding to the institution.	KH.52 Disciplinary Procedures only used in exceptional circumstances.
63	MK.73 Most UK HEIs now reckon with the fact that recent Government Funding Policy has made funding for Teaching and Research very uneven.	Ali.8 The Manchester Business School has an international reputation for Excellence in delivery a high quality MBA programme for top executives from both private and public sector organisations.	KH.53 Have in place Dean Development Programmes to made top management aware of capability policy and disciplinary policy, and to train them on how to put such policies into action.
64	MK.74 The benefits of the Research Assessment Exercise (RAE) means some UK HEIs possibly do get some increase in funding, but the system generally has suffered 40% reduction in funding over the last two years	Ali.10. Staff with less than satisfactory performance levels (determined over a period of time) will not be allowed to teach on high profile courses. This means we have a set of performance indicators for assessing the performance of individuals on our programmes.	KH.54 Creating and managing a Portfolio of Excellence Models to maximise the benefits of gaining Excellence Ratings from all sources.
65	MK.75 Many academics in UK HEIs cannot see any good reason why one should expect any increases in funding in the foreseeable future.	Ali.12. The notion of 'excellence' from our post-graduate students' perspective relates to the delivery of knowledge and is based on a different set of criteria.	KH.55 Institutional Mission focused on core-plus areas: Research, Teaching, Learning, Widening Participation, Collaborative Partnerships, International reputation, Continuous Quality Improvement, People Management.
66	MK.76 **Most UK HEIs have not be able to diversify their sources of funding**	Ali.14. The Manchester Business School is running an international teachers programme	KH.56 RAE, TQA, IIP, EFQM, EQUIS are seen as useful diagnostic tools for

	well enough to deal with the negative impact of Reduced Funding on Quality Improvement	to focus on Teaching Excellence. Substantial amount of time will be devoted to the delivery of knowledge.	situation analysis relating to specific areas.
67	MK.82 In most UK HEIs, what life is for a lecturer with children, a car and a house, is ignored as a critical success factor.	Ali.30. We are trying to get our acknowledgement teachers to actually talk to them, to encourage sharing of best practices, and eventually to reward their performance.	*KH.57* Using a mix of diagnostic tools to help identify the real problems in key areas and leading to optimal results.
68	**MK.95** **Recent Government Policy towards HE makes it more difficult to define 'higher education' compared with the definition of 'further education'. The dual agenda are in conflict, and today's institutions need to achieve a fine balance between the two agenda, to help them focus on their strategic direction**	Ali.31. We are mainly relying on people's good nature to encourage sharing of best practices, and highlighting the potential benefits to be gained from sharing best practices.	KH.63 *Leadership aware of the need to be sure that a model can and will deliver success before deciding on full-scale implementation.*
69	AN.17 There is little effort at educating and training academic and administrative staff to understood the concepts of Best Practice and of Excellence	Ali 32. The Manchester Business School is a financially autonomous institution. Certainly, at the post-graduate level, the Business School sees itself at the sharp-end of commercial reality.	*KH.64* Regularly updating all sources of excellence ratings.
70	AN.27. ***Having too many Procedures increases bureaucracy and the cost of quality.***	Ali.33. *Substantial amount for funding teaching comes from the government.*	*KH.65* *Using the extent to which a model is 'holistic' and the level of 'integration' as criteria for evaluating and selecting excellence models for implementation.*
71	Ali.1. Not able to clearly define and understand the meaning of the term 'Excellence', making it difficult to implement in practice.	Ali.34. Essentially the QAA framework is being used as a way of assuring the government that funding for undergraduate and post-graduate teaching is efficiently allocated and utilised.	*KH.66.* Role modelling excellence by creating centres for excellence as basis for spreading the benefits of using excellence models.
72	Ali.15. *Many teachers in my school still hold on to a traditional view of teaching, and are not aware of new innovative ways of teaching. Traditional methods of teaching may be suitable for primary and secondary school teaching, but not undergraduate and post-graduate teaching.*	Ali.38. *We identify best practices for evaluation selection and implementation, generally through the improvement process or proposals put forward to the department.*	KH 67. Reducing the Cost of Quality through efficient use of time and other scarce resources.
73	Ali.19. We have argued that there is a difference in practice between our definition	Ali.39 **We identify best practices either through ad-hoc observation of our teaching**	KH 68 Eliminating or minimising conflicts of objectives in all areas to ensure

	of 'excellence' and the QAA's definition. The QAA's procedures are essentially bureaucratic. Our definition of 'excelleence' in Teaching encourages a holistic customer-focused approach to quality management, the QAA's definition encourages a bureaucratic, paper-based approach to quality management.	**processes by programme directors, programme leaders, or programme administrators, or through our continuous monitoring systems.**	effective integration.
74	Ali.20. The QAA and HEFCE Models tend to make the concept of 'Excellence' static instead of it being dynamic. Trying to make a dynamic concept static is a problem. The notion of excellence is very dynamic, formal models tend to make it rather static.	Ali.40. *We do not have a single source of best practices. It comes as a result of discussions with all entrusted parties, to arrive at a consensus.*	KH.69 Successfully integrating Academic and Administrative Activities in the area of Teaching.
75	*Ali.21.* We have found that the notion of documentation of best practices can be very problematic if it is allowed to become too rigid, formal and bureaucratic.	*Ali.41.* *We have a formal system for identifying or capturing best practices from both internal and external sources.*	KH.70 Most academic staff are concentrating on Teaching/Learning, Research/Scholarship.
76	*Ali.23.* *There is nothing worse than boredom. Best Practices provide us with something that catches the imagination of students – the 'woo' factor.*	Ali.42. *All courses or programmes are evaluated. Every single course is evaluated including every single element of a course is evaluated.*	KH.71 Most administrative staff are concentrating on Open-days, Enrolment Process, Induction Process, etc.
77	Ali.24. We do not have formal methods of documenting or capturing Best Practices.	*Ali.43.* **We have a formal questionnaire for the evaluation.**	KH.72 Some academic and administrative staff perform overlapping activities e.g. Staff Recruitment.
78	Ali.25. We do not have mechanism for telling staff - well done you have done an extremely good job, you will be rewarded for that.	*Ali.46.* **I have no problems with peer review - I think it is a good idea.**	KH.73 *Having in place a Business Recruitment Admission Team = BRAT, an integrated project team comprising of Marketng staff, Course administrators, Academic Recruitment leaders, Central Clearing and Admissions staff. It is interdepartmental and crosses schools and central departments within the university.*
79	Ali.26. *Our reward systems are substantially based on identifying who the best practitioners are, but we do not actually learn from them. The main reason being that, in higher education we do not have mechanisms in place for identifying best practices and rewarding best practice practitioners.*	*Ali.49.* **Recently we invited a colleague from the United States. He has developed a variety of models for active learning, which he uses to engage the imagination of students. We invited him over to give some of our teachers some training in the use of his techniques.**	*KH.74* Have acquired a number of Teaching Company Schemes as a source of Teaching income.

80	Ali.27. The structure of UK academic institutions is such that individual status does not encourage co-operation.	*Ali.55.* **There is a limit to satisfying students' demand.**	KH.75 Looking for external sources for Research Income to fill the gap created by the annual decline in HEFCE Funding.
81	Ali.28. Our Reward system is largely based on individual status.	*Ali 62.* *Quality Assessment regimes puts pressure on UK higher education institutions to improve the quality of teaching, research and services in order to attract and retain more international students, sometimes even at the expense of local students. A lot of revenue is coming from serving international students.*	KH.76 Taking advantage of HEFCE's Funded Schemes such as the Community Management Project linked to Medium-size organizations based in communities where HEI operates.
82	Ali.29. In most UK HEIs, there is no recognition of 'good citizenship'. You get promotion if I don't get there	*Ali.63.* There is now a drive to promote 'international excellence', which puts enormous pressure on institutions to satisfy external needs for quality improvement at the expense of internal quality improvement.	KH.77 Looking out for Consultancy Income by setting up an Enterprise Centre as a central organization within the university responsible for looking for , External Consultancy work and managing External Relations
83	Ali.35. I personally do not believe that the QAA framework is being used as a way of assuring the government that funding for undergraduate and post-graduate teaching is efficiently allocated and utilised. because, most of our departments keep getting a maximum QAA score of 24/24 yet when you ask students how was the course, they tell us it was not satisfactory.	Ali.65 I have a degree of reservation about this notion of critical success factors.	KH.78 Academics as administrators or managers are trained to become people centred.
84	*Ali.45.* We are in the process of formally introducing Peer Review of our teachers. But we have an annual review process.	Ali.68. Critical Success Factors for Teaching Quality include: • *A good formal structure,* • *Well structured courses,* • *A well thought out tried and tested delivery systems,* • *A simple process of human interaction.* • *Each of these elements has to achieve a certain level of quality improvement.*	KH 79 Having in place an Academic-administrator Model comprising of two types of Senior 'Academic' Staff. Those with and those without people management and organizational skills.
85	*Ali.47.* Peer Review should not be carried out by people from the same institution.	*Ali.69.* *There is a need to Trade-off between Critical Success Factors. This trade-off requires balancing all these factors in order to achieve optimal results. For example, I have a situation involving staff who are very badly prepared for their courses. I have developed a simple human interactive process based on individual personalities, to carry them through their programmes. Equally, I run extremely well structured courses, with very little interaction, and yet be successful in my delivery and in achieving the course objectives. So there is a possibility of trade*	KH.80 The School's Leadership Group/Team is a mix of Senior Academic Staff with and without people management and organizational skills

		offs in achieving the objectives set for each critical success factor.	
86	Ali.48. I think the quality of teaching is abysmal in most UK institutions with respect to Teaching - all you get is the perpetuation of the same thing	*Ali.70.* *The Human Factor is a Critical Success Factor. There are identifiable critical success factors for achieving and sustaining quality improvement, one of which is the human element as the balancing factor in achieving optimal results.*	KH.81 A central core within the school's Leadership Group comprises of only Senior Academic Staff with people management and organizational skills.
87	Ali.52. Formal systems have the tendency of becoming bureaucratic. This is precisely what we have in most UK higher education institutions. I have a huge pile of paper work to complete from all sorts of Quality Committees within the University of Manchester and from the Manchester Business School itself. I also have a number of committee meetings to attend, I hardly ever turn up for these meetings, and hardly ever look at the documents. I also have a whole web-site dedicated to a wide range of framework which not many bother to look.	*Ali.71.* **Some people argue that it is nonsensical to talk about teaching 'quality' without thinking about 'contents'.**	KH 82 Having in place an integrated leadership structure comprising of staff with both academic and administration experience/background.
88	*Ali.60.* The is a 'mad' emphasis on the regime of Research Assessment Exercise (RAE) on which too much resources have been wasted on, and it only provides a very narrow definition of research, and inappropnate critena for research assessment.	*Ali.80.* *I believe 'practice' should inform 'theory', but for me it has never been a caparison between theory and practice I simple do the most sensible and rational thing In business management most of the theory on scientific management was derived from business practice, businesses existed before scientific management theories were created.*	KH.83 Decision-makers are encouraged to handle about '5-7' Performance Indicators at a time.
89	Ali.67. The problem with Critical Success Factors is that first of all identifying what the critical success factors are and two whether or not you've actually got the complete set of factors which paint a complete picture of the situation you're dealing with.	*Ali.81.* We at the Manchester Business School have not invented any management principles a lot of what we do is just documenting our best or good practices. We therefore examine our practices to inform our theory on management principles.	KH.84 Where there are many Performance Indicators a hierarchical structure is developed to identify the key Performance Indicator.
90	*Ali.89* *The cost of administrative support can be high, perhaps, that justifies the need for an integrated approach to minimise the cost and maximise the benefits of synergies.*	*Ali.84* My view is 'integration' does not work all the time.	KH 85 There is a clear distinction between Yearly-Performance Indicators and All Year-Performance Indicators
91	Ali 91.	Ali 86.	KH 86

	The disappointing aspect of 'integration' is when students' are not very satisfied.	**The point is if you care about teaching quality you really do not need an integrated approach you just do it simultaneously.**	Different schools within the university decouple Performance Indicators to meet their own needs.
92	*Ali.95.* The problem at undergraduate level is that administrative activities tend to drive academic activities. When administration takes over it becomes a danger to improving and sustaining academic quality. Administrative activities must support the academic function.	*Ali.87.* Some Key Critical Success Factors - Teaching • What you need are the resources, the authority, and the capacity to teach. • Capacity is under your control, the authority is derived from your appointment, and should not be withheld, and I think the issue is you need the teaching resources to teach effectively. • We also need to know the learning styles of our students in order to sustain our performance levels.	KH.87 Making use of Excellence Models, which encourage use of Fewer Performance Indicators/Measures.
93	Ali.96. *Teachers should be teaching and not spend their time recruiting people or offering career advice. Administrators should be asked to carry out these activities. Unfortunately, this is not what is happening in most UK higher education institutions, where most academics are increasing being asked to do administrative duties as part of their appointment. This is affecting the quality of teaching, and the quality of research.*	*Ali.88.* **We have tried integrating academic and administrative models for quality improvement by identifying similarity in processes. There are certain academic processes, which require bureaucratic procedures from administrative staff.**	KH.88 Performance Indicators selected reflect changes in the needs and expectations of stakeholders.
94		*Ali.92.* *Our administratve support is extremely good in collecting all the information relating to dealing with students concerns, putting them on the web, sorting out examination time tables, having student career advice centres, providing information on recruitment, dealing with assessment and assignments, etc.*	KH.89 Managing Performance and Capability Policy is aimed at being 'developmental' not 'punishment'.
95			MK.3 Successfully using the QAA Self-assessment methodology to greatly improved institutional accountability to the Government in the area of Teaching
96			MK.4 Successfully using the QAA Self-assessment Process to help Teaching Staff to think more carefully about the content and development of Curriculum.

97			MK.5. Successfully using the QAA Self-assessment Process to help Teaching Staff work together as a Team in developing Curriculum more than they did before.
98			MK.6 The QAA Self-assessment Process is well documented and serves as basis for training staff on the benefits of self-assessment methodology in general
99			MK.7 External QAA Assessors use internal self-assessment results as the datum-base on which to proceed to the next phase of external assessment

APPENDIX: C5

POOL OF 152 *WEAK, GOOD,* AND *BEST* ACADEMIC QUALITY MANAGEMENT PRACTICES IN UK HEIs

Source From The 'Nine' Frameworks in Chapter Four (Osseo-Asare Jr. 2003)

Note:

This 'pool' identifies specific tasks, activities, and processes for improving the efficiency and effectiveness of 'staff' engaged in quality improvement functions.

CODING SYSTEM: *Each Task or Practice below is linked to one of the 64 'secondary' CSFs in Appendix A2, which in turn is lined to the 28 'primary' CSFs in Appendix A1 above For example, the first Task or Practice on the list below relates to: Academic Quality and Academic Excellence; the 'first' 'digit' in the code [1.1.1] i.e. '1' shows it is linked to the first CSF listed in Appendix A1, the second 'digit' i e. '1' shows it represents a secondary CSF under 'leadership' as the 'primary' CSF. The third 'digit' '1' represents the task or practice number under Appendix A3. That is Task Number '1' is linked to 'secondary' CSF Number '1' in Appendix A2, which in turn is lined to 'primary' CSF Number '1' in Appendix A1.*

1. Academic Quality, Academic Excellence [1.1.1]
2. Teaching, Learning, Scholarship and Research Quality and Excellence [1.1.2]
3. Vision underpins Mission [1.2.1]
4. Vision of National and International Excellence [1.2.2]
5. Diversity and Equality [1.3.1]
6. Learning and Knowledge Society [1.3.2]
7. Continuous Improvement through Value for Money [1.4.1]
8. Academic Freedom and Autonomy [1.4.2]
9. Maintenance and Investment [2.1.1]
10. Deployment of Quality Improvement Policy and Strategy [2.1.2]
11. ICT infrastructure for academic and administrative operations [2.1.3]
12. Networks for Internal Transfer of Best Practices [2.1.4]
13. Cross-Institutional Networks for sharing Best Practices [2.2.1]
14. Websites design and update [2.2.2]
15. Systems for capturing feedback from students and other external stakeholders [2.2.3]
16. Dedicated Marketing Department leading communication of brand and reputation [2.2.4]
17. Strong Budgetary Support [3.1.1]
18. Teaching and Research Staff involvement in setting Quality improvement targets [3.1.2]
19. De-centralised Staff Development Budgetary Systems [3.1.3]
20. Leadership Training [3.1.4]
21. Addressing Staff Training and Development Needs [3.2.1]
22. Implementation of an Open two-way Communication System [3.2.2]
23. Systems for capturing feedback from staffs [3.2.3]
24. Systems for addressing welfare issues [3.2.4]
25. Funding to support Professional Development of Staff [4.1.1]

26. ICT Support for Teaching and Research Staff [4.1.2]
27. Support for Staff Welfare Issues [4.1.3]
28. Strategies for Handling Staff-Student Complaints about Teaching and Learning Styles [4.2.1]
29. Managing Staff Finance and other related welfare issues [4.2.2]
30. Encouragement for Team Effort rather than Individualism.[4.2.3]
31. Promotion to Senior Lectureships and Professorship [4.3.1]
32. Annual Staff Appraisals effectively linked to Promotions and Improvement in Staff Finances [4.3.2]
33. Policies NOT properly synthesised from Principles and Values [5.1.1]
34. Policies on Teaching and Research Quality are NOT explicitly stated. [5.1.2]
35. Chancellery, Deanery, Heads of Department, Quality Managers, not able defend the levels of funding [5.2.1]
36. Inefficient allocation of funding and other resources for Teaching and Research [5.2.2]
37. Weak Staff Retention strategy resulting in rising Staff Turnover and Staff-student ratios [5.2.3]
38. Uncertainty about Funding Levels and therefore Staffing Levels [5.3.1]
39. Doubt about the 'timelines' of the declared levels of quality improvement achieved [5.3.2]
40. Tasks, activities, and functions making up a PROCESS are not well defined and documented [6.1.1]
41. Job Descriptions show extensive overlaps in the actual work Teaching and Research Staff are expected to carry [6.1.2]
42. Job Specifications do not effectively match individual ability with Task [6.1.2]
43. Process Performance not accurately Measured [6.2.1]
44. Not many Teaching and Research Managers and Staff are directly involvement in setting Teaching and Research Quality Improvement Strategies, Objectives and Targets [6.2.2]
45. Resource allocation for Process Improvement is not based on the concept of internal customers and suppliers [6.2.3]
46. Inaccurate and irrelevant Data [7.1.1]
47. Not well sourced and out of date [7.1.2]
48. Information overload resulting from weak information management policy [7.2.1]
49. Increasing use of irrelevant information for Decision-making [7.2.2]
50. Inability to reduce Staff Turnover [7.3.1]
51. Lack of dedicated Marketing Departments [7.3.2]
52. Approach to Managing Knowledge is Retrospective [7.4.1]
53. Not acting effectively on feedback from important sources [7.4.2]
54. Feedback from Students and Staff Surveys are not effectively incorporated into Teaching and Research Quality Improvement Policies and Strategies [8.1.1]

55. Funding and other resources required to achieve expected improvements in Teaching and Research Quality never materialise [8.1.2]

56. Absence of a deliberate Policy and Strategy to reduce Staff Turnover and maintain acceptable Staff-student ratios [8.1.3]

57. Internal Performance Appraisal and Performance Management Systems are designed to enhance External Reporting and therefore the reputation of the institution as a whole, and not to address directly serious issues relating to the reasons why staff with high potential are not performing well [8.2.1]

58. Lack of regular maintenance and increased investment in teaching and research infrastructure is blamed on Funding Backlogs, which are linked to Teaching and Research Quality and Staff Performance Gaps [8.2.2]

59. Lip-service is being paid to real staff involvement by not incorporating staff experiences, ideas and suggestions in the process of improving Teaching Quality Assessment and Research Assessment Exercises Scores [9.1.1]

60. Little or no delegation of Authority and Responsibility to subordinate staff [9.1.2]

61. Decline in Job satisfaction has led to decline in Staff Commitment to Teaching and Research Quality Improvement [9.1.3]

62. Leadership Training and Development Schemes are selective and are not based on well-defined training gaps [9.2.1]

63. Absence of succession planning, because of top management desire to maintain the status quo [9.2.2]

64. Weak support from superiors and Team Members [10.1.1]

65. Irregular flow of funding and other resources [10.1.2]

66. Teaching and Research is increasing becoming a source of anxiety [10.2.1]

67. Increasing workloads because of rising student numbers [10.2.2]

68. Lack of recognition, and personal feeling of achievement [10.3.1]

69. Lack of Promotion in line with career objectives of Teaching and Research Staff. In some institutions, senior lecturers due for promotion to Readership and Professorship are told to wait because of budgetary constraints [10.3.2]

70. Even though there is recognition that funding and other teaching and research resources are scarce, only a hand-full of institutions have in place deliberate strategies for creating synergies [11.1.1]

71. Synergy is equated to Cost-cutting measures rather than Efficiency of Resource Allocation – a strategic error of judgement [11.1.2]

72. Areas of synergies between teaching and research are not fully exploited; resulting in missed opportunities and spiralling costs of bureaucracy [11.2.1]

73. Most academics and administrators lack the skill for effective management of interfaces between academic and administrative activities; teaching and research; and scholarship and research. [11.2.2]

74. Lack of skill and facilities for teaching students with disabilities [12.1.1]

75. Inability to help students move from surface-learning to deep-learning [12.1.2]

76. Academic Staff inability to critiques publications as basis for improving Research Outputs [12.1.3]

77. Lack of regular maintenance and investment in Teaching and Research infrastructure [12.1.4]

78. Academic, Administration, and Support-service areas not effectively integrated [12.1.5]

79. Collaboration with Further and other Higher Educational Institutions; Government Departments – including the QAA and HEFCE; and other local, regional, national and international Public Sector organisations [12.2.1]

80. Partnerships with local, regional, national, and international Private Sector Organisations in support of Masters, Doctoral and Post-doctoral Programmes and Professorships in applied research [12.2.2]

81. Justification of Strategic Quality Improvement Plans based on Institutional and Departmental priorities, and realistic achievable goals and objectives relating to Teaching and Research [13.1.2]

82. Robust Defence of Long and Short-term Spending Plans relating to Teaching and Research; backed by realistic 3 – 5 year Cash Flow Forecasts [13.1.3]

83. Rationalisation based on Teaching and Research priorities and Cost-Benefit Analysis [13.2.1]

84. Implementation of an Open Bidding Process for Funds under explicit conditions [13.2.2]

85. Budget Centres comprising of Cost Units, Revenue Units, Profit Units working as a Team [13.3.1]

86. Activity-based Costing is most appropriate for costing Teaching and Research Quality Improvement Activities for effective management of Teaching and Research Overheads [13.3.2]

87. Few people understood the nature of tasks and activities making up a process, mainly because processes are not well documented to allow ineffective processes to be redesigned [14.1.1]

88. There is little or no systematic basis for identifying, evaluating and selecting tasks and activities with the required characteristic features to enhance process performance before key teaching and research processes are designed or redesigned [14.1.2]

89. Difficulty holding the framework of core processes together for a long period, because of lack of regular monitoring of process performance, and feedback of results into the daily process control mechanism [14.2.1]

90. Rising Staff Turnover means staff with the relevant skills for effective process management are not always going to be around to sustain initial process improvements achieved, without having to restart the improvement initiative all over again [14.2.2]

91. Job Descriptions do not specifically assign particular task or activity to one individual but to a team, making it difficult to know who exactly is doing what in a group situation [15.1.1]

92. Weak Team leadership, resulting in task not properly matched with individual abilities and skills [15.1.2]

93. Lack of recognition for task well completed, because the link between 'task completion' and 'rewards' is only rhetorical – no such link has been established or is deemed necessary for a variety of reasons, of which budgetary constraints is the most popular [15.2.1]

94. Staff Perception that, their immediate superior, examples: Team Leaders, Heads of Department or the Dean of School are simply not capable of rewarding them through pay rises, promotions or improving their working conditions [15.2.2]

95. Frequent restructuring resulting in frequent changes in Leadership and Policy and Strategy at all levels of the management [16.1.1]

96. Wrong timing of decisions to discontinue a Programme or an improvement initiative because of continuous lose of teaching and research revenue [16.1.2]

97. Lack of Commitment from the Chancellery, Deanery, and Heads of Departments to Continuous Funding of Programmes or improvement initiatives, through regular maintenance and increased investment in teaching and research infrastructure [16.2.1]

98. Rising Budgetary Deficits due to mismanagement of budgetary allocations; resulting in departments having idle cash and no viable projects to spend on, and others with viable projects with no cash [16.2.2]

99. Regulations in some institutions are not clear enough for most undergraduate students in this era of widening participation [17.1.1]

100. Regulations not varied to meet the need of the diverse student population. To do this effectively requires input from Teaching and Research Staff, Administrative and Support-service Staff, and representative of Students' Unions [17.1.2]

101. Complaints procedures not harmonised, too bureaucratic, and restricted to lower level managers and leaders who are not key decision-makers in their departments, school or institutions [17.2.1]

102. Pastoral Care Systems not dealing effectively with areas students are most interested in, such as: students finances, staff-students relationships, health and safety, socialisation – including anxieties and fears of students in particular the young, disabled, from overseas, with language difficulties [17.2.2]

103. Mismanagement of serious academic offences and appeals relating to examinations and assignments results, and research supervision at undergraduate and post-graduate levels [17.2.3]

104. Results from Students Satisfaction Surveys were not incorporated into improvement policy and strategy on timely basis, resulting in missed opportunities to address the situation [18.1.1]

105. Inability of managers and leaders to prioritise the needs and expectations of students, because of budgetary constraints [18.1.2]

106. With increasing demand for university places, most institutions are now only in the business of matching teaching and research performance to students expectations, thereby satisfying them and not to delight them by exceeding their expectations – which to most is not cost-effective in an excess- demand situation [18.2.1]

107. Financially stable institutions in particular the pre-1992 group and some post-1992 institutions recognise the strategic importance of strengthening the link between Student Delight and Student Loyalty [18.2.2]

108. Questionnaire not well designed to capture the real needs and expectations of Students [19.1.1]

109. Some institutions take advantage of the fact that some students are not able to effectively articulate their needs and expectations [19.1.2]

110. Few institutions combine the use of Questionnaires with Focus Groups of Students and Tutors; and Questionnaire Questions are mainly Quantitative, with very few open-ended questions [19.1.3]

111. Policy and Strategy Reviews are rarely on time for implementation, because of confusion over how to integrate intended strategy with emergent strategy [19.2.1]

112. Policy and Strategy Reviews were on time but the need for restructuring changes means Policy Deployment is put on a hold, until everyone is in position in the new or emerging structure [19.2.2]

113. Regulations easily misunderstood and frequently misinterpreted [20.1.1]

114. Few Managers like to deal with issues of discrimination openly because it offends individual sensitivity at work [20.1.2].

115. Many who get the opportunity to do what they really want after fighting hard for it within their institutions simply become unable to cope in an environment which was not prepared for them in the first place [20.2.1]

116. Even though the society as a whole demands Equal Opportunity, top managers and leaders of institutions continue to pay lip-service; and will only pay serious attention if it impacts significantly on their institution's national and international reputation as a Centre for Academic Excellence [20.2.2]

117. Problems and Opportunities relating to Teaching and Research Quality are not well defined, and alternative ways of solving a problem or taking advantage of an opportunity are not rationally evaluated; primarily because a formal deliberate system for decision-making is not in place [21.1.1]

118. Over-dependent on Top-down decision-making processes, associated with hierarchical organisational structures. This has led to misuse of two-way communications systems, whereby decisions made at the top are communicated downwards and data and information on are passed upwards [21.1.2]

119. Staff involvement is mainly superficial, where they are required to endorse decisions already made at the top; any attempt to critical is seen as a sign of disloyalty [21.2.1]

120. Staff involved in less important decisions, leaving them feeling isolated, frustrated, with little or no sense of achievement or value [21.2.2]

121. The Performance Appraisal System (PAS) is not effectively integrated with Performance Management System (PMS) [22.1.1]

122. Impact of Team dynamics on actual performance at work is ignored [22.1.2]

123. Procedure for Performance Appraisal Systems (PAS) not varied sufficiently to take account of the needs of Staff with disabilities or difficulties in a work environment [22.1.3]

124. Lobbying still places a major role in Staff Promotion and Rewards [22.2.1]

125. Lack of action as a result of the unresolved debate about whether the association between performance indicators and rewards is probabilistic or deterministic. Majority of institutions operate on the basis that it is probabilistic [22.2.2]

126. Performance Measures and Indicators directly linked to Key Institutional Results e.g. TQA and RAE Measures and Results are ranked second to none, at the expense of measures relating to staff performance [22.2.3]

127. Press commentary on a number of Environmental Sustainability Projects under taken by some institutions – in particular research-focused pre-1992 universities - have generally been favourable; an indication of favourable Society Perception of Institutional Quality and Performance and Contribution. There is however, more room for improvement in some – in particular post-1992 university now focussing on environmental research [23.1.1]

128. Less aggressive reporting of institutional activities to assist in the preservation and sustainability of natural resources – choice of transportation for staff and students, reduction of waste, economic usage of gas, water, electricity, recycling materials [23.1.2]

129. Less aggressive in adopting preventive measures to promote Health and Safety at Work despite the fact that Health and Safety Policy and Strategy are excellently documented and circulated to all Staff. An example of a fire-fighting approach to quality management [23.2.1]

130. Less effective in the management of stress at work. Number of Days off Sick are not effectively monitored and followed up for appropriate action to be taken, in order to control the negative impact of Absenteeism on Staff and Student Morale [23.2.2]

131. Some institutions have not be very successful in working with the QAA and HEFCE to meet the requirements of Students and Staff with Disabilities [24.1.1]

132. Many institutions do not have deliberate strategies for dealing with the impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduate; Staff Teaching Practices and Staff Morale [24.1.2]

133. Apart from providing employment to the local community, not many institutions are actively involved in support for Sport and Leisure – arguably because of Budgetary constraints [24.2.1]

134. Most pre-1992 institutions - are frequently cited for National and International Excellence in Research, Scholarship, Teaching and Learning. This in most cases is the direct result of successful collaborations and partnerships with both public and private sector organisations [24.2.2]

135. Majority of Staff at all levels of management and leadership – with responsibility for Teaching and Research Quality Improvement - do not belong to any reputable Professional Body promoting Teaching, Learning and Research Quality [25.1.1]

136. There is evidence of low value intellectual capital judging from the fact the profile of Staff responsible for Teaching and Research Quality lack knowledge and experience in integrated management and interface management – which are based on multiple disciplines [25.2.1]

137. Not all institutions use a comprehensive and balanced set of Financial and Non-financial Measures [26.1.1]

138. Some institutions have experienced negative trends in meeting Teaching Budgets over a five-year period [26.1.2]

139. Some institutions have not gained any outstanding Teaching and Learning Performance against Teaching and Learning Quality Improvement Objectives and Targets, over a five-year period [26.1.3]

140. Teaching Quality Assessment (TQA) Results cannot be linked to Planned Teaching Quality Improvement Exercises, and to Teaching Quality Improvement Policy, Strategy, Objectives and Targets [26.1.3]

141. Not all institutions use a comprehensive and balanced set of Financial and Non-financial Measures [26.2.1]

142. Negative trend in meeting Research Budgets over a five-year period [26.2.2]

143. Some institutions have not gained any outstanding Research Performance against Research Quality Improvement Objectives and Targets, over 5 – 10 year period [26.2.3]

144. Research Assessment Exercise (RAE) Results cannot be linked to Planned Research Quality Improvement Exercises, and to Research Quality Improvement Policy, Strategy, Objectives and Targets [26.2.4]

145. Some institutions have not met their Staff Budgets for a five-year period, and are now dealing with serious staff retention, and recruitment problems [27.1.1]

146. Irregular supply of teaching resources, because of budgetary constraints; as a consequence some institutions are experiencing sharp reduction in the number of supplier invoices paid within 30 days over a three-year period [27.1.2]

147. Some institutions have experience rising class sizes, stemming from discontinued programmes, frequent restructuring exercised, staff shortages and lack of regular maintenance and increased investment in teaching and research infrastructure [27.2.1]

148. Fewer assignments and reduced number of face-to-face contacts with Teaching Staff and/or Dissertation Supervisors, is impacting on the Quality of Students Learning Experience [27.2.2]

149. Inaccurate Cash Forecasts for carrying out Teaching and Research Quality improvement, commonly blamed on poor Teaching and Research Quality Planning [28.1.1]

150. Short-term Quality Improvement Plans are not effectively integrated with Long-term Quality Improvement Plan, resulting in misappropriation of resources and missed opportunities [28.1.2]

151. Leadership of many institutions are heavily dependent on the Government's Budgetary increases in Funding for investment in Teaching and Research Infrastructure, and have been very reactive in diversifying their sources of incomes to match the Expenditure outlay for clearing the funding backlog and provide for new infrastructure [28.2.1]

152. Lack of deliberate strategies to deal with the backlog in funding for teaching and research infrastructure, because of lack of a Long-term Quality Improvement Plan [28.2.2]

APPENDIX: C6

125 CONCEPTS AND PRINCIPLES FOR EFFECTIVE ACADEMIC QUALITY MANAGEMENT IN UK HIGHER EDUCATION INSTITUTIONS

Source: Drawn from Appendix C5

NOTE:

These concepts and principles below are 'synthesised' from perceived and established associations between 'primary' CSFs, 'secondary' CSFs and the tasks and practices linked to each CSF. These associations are represented by reference to relevant codes below.

1. Academic Quality is the means for achieving and sustaining Academic Excellence [1.1.1]
2. Academic Quality and Excellence must be defined in terms of Teaching, Learning, Scholarship and Research; and benchmarked against Local, Regional, National, and International levels of Quality and Excellence [1.1.2; 1.2.2]
3. Personal and Institutional Visions must be integrated and must underpin Institutional Mission [1.2.1]
4. Personal and Institutional Values must relate to issues of Diversity, Equality, Life-long Learning, the creation of a Learning Society and a Knowledge Economy [1.3.1; 1.3.2]
5. Continuous Improvement as the vehicle for achieving an optimal balance between Intellectual Freedom and Institutional Autonomy on one hand; and Accountability through Value for Money on the other hand [1.4.1; 1.4.2]
6. Deployment of Academic, Administrative, and Support-service Quality Improvement Policy and Strategy relating to regular maintenance and increased investment in Teaching and Research Infrastructure - including ICT infrastructure [2.1.1; 2.1.2; 2.1.3; 2.2.2; 4.1.2]
7. Internal and Cross-Institutional Networks for Transfer and Sharing Best Practices [2.1.4; 2.2.1]
8. An integrated Management and Marketing Intelligence Systems for capturing feedback from staff, students and other stakeholders; requiring a dedicated Marketing Department leading communication of Brand and Reputation [2.2.3; 2.2.4; 3.2.3]
9. Involvement of Teaching and Research Staff in Policy and Strategy formulation; and in setting Quality improvement Objectives and Targets for their areas of responsibility in order to gain their trust and commitment [3.1.2]
10. Chancellery, Deanery, Heads of Department, and Quality Managers able to defend levels of funding in support of improvement initiatives. De-centralised Staff Development Budgetary Systems, to ensure strong Budgetary Support for Teaching and Research Quality Improvement Initiatives. Staff Training and Development Needs to include Leadership Training and Professional Development [3.1.1; 3.1.3; 3.1.4; 3.2.1; 4.1.1; 4.3.1; 4.3.2; 5.2.1; 5.2.2; 5.3.1]
11. Implementation of an Open two-way Communication System [3.2.2]
12. Implementing Systems and Procedures for supporting and addressing Staff Welfare Concerns [3.2.4 4.1.3; 4.2.2]
13. Strategies for Handling Staff-Student Complaints about Teaching and Learning Styles and Facilities [4.2.1]
14. Maximising the benefits derived from Individual and Team Contributions to overall Quality Improvement Effort [4.2.3]
15. Teaching and Research Quality Improvement Policies should be properly synthesised from Principles and Values; and explicitly stated. This will ensure that, tasks, activities making up a Process are well defined, and timely achievement of expected levels of Quality Improvement, and that Staff Retention Strategy result in reduction in Staff Turnover and Staff-student Raito [5.1.1; 5.1.2; 5.2.3; 5.3.2; 6.1.1]
16. Job Descriptions should clearly define the responsibility of individual Teaching and Research Staff, and the their responsibilities in a Group situation to prevent duplication of the actual work done. Job Specifications should effectively matched individual ability and skills with tasks to be performed [6.1.1; 6.1.2]
17. Process Performance needs to be measured as accurately as possible; and resource allocation for process improvement should be based on the requirements of internal and external customers and suppliers [6.2.1; 6.2.3]
18. Top leadership should encourage directly involvement of many Teaching and Research Managers and Staff in setting Teaching and Research Quality Improvement Strategies, Objectives and Targets [6.2.2; 1.3.1]
19. Managers and leadership should promote the use of accurate and relevant Data, well sourced and up-to-date in the strategic quality planning process [7.1.1; 7.1.2]
20. Preventing Information overload in order to strengthen data and information storage, retrieval, processing, and reporting policy [7.2.1]
21. Increasing the use of relevant data and information for quality improvement Decision-making [7.2.2]
22. Brainstorming effective strategies for reducing Staff Turnover [7.3.1]
23. Have in place a dedicated Marketing Department [7.3.2]
24. Approach to Managing Knowledge should be Retrospective and Prospective [7.4.1]
25. The need to take effective action on feedback from important sources [7.4.2]
26. Feedback from Students and Staff Surveys should be effectively incorporated into Teaching and Research Quality Improvement Policies and Strategies [8.1.1]
27. Ensuring that Funding and other resources required to achieve expected improvements in Teaching and Research Quality materialise [8.1.2]
28. The need to have in place a deliberate Policy and Strategy to reduce Staff Turnover and maintain acceptable Staff-student ratios [8.1.3]
29. Internal Performance Appraisal and Performance Management Systems should be designed to enhance External Reporting and therefore the reputation of the institution as a whole, and also to address directly serious issues relating to the reasons why staff with high potential are not performing well [8.2.1]
30. Ensuring regular maintenance and increased investment in teaching and research infrastructure through reduction in Funding Backlogs linked to Teaching and Research Quality and Staff Performance Gaps [8.2.2]
31. Ensuring active staff involvement by incorporating staff experiences, ideas and suggestions in the process of improving Teaching Quality Assessment and Research Assessment Exercises Scores [9.1.1]
32. Encouraging delegation of Authority and Responsibility to subordinate staff [9.1.2]
33. Increase Job satisfaction as a means to increase Staff Commitment to Teaching and Research Quality Improvement [9.1.3]
34. Leadership Training and Development Schemes should be based on well-defined training gaps [9.2.1]

35. The need to have in place succession plans to ensure smooth transfer of authority and responsibility [9.2.2]

36. The need to strengthen support from superiors and Team Members for quality and performance improvement initiatives [10.1.1]

37. Leadership should ensure regular flow of funding and other resources for Teaching, Learning, Scholarship, and Research activities [10.1.2]

38. Ensuring that Teaching and Research seize to be a source of anxiety to teachers and researchers [10.2.1]

39. Reducing workloads resulting from rising student numbers [10.2.2]

40. Leaders should recognise staff achievement [10.3.1]

41. Leadership should ensure there is budgetary allocation to support Staff Promotion in line with their career objectives in Teaching and Research [10.3.2]

42. The need to have in place deliberate strategies for creating synergies [11.1.1]

43. Equating Synergy Efficiency of Resource Allocation [11.1.2]

44. Areas of synergies between teaching, learning, scholarship and research should be fully exploited; in order to reduce the costs of bureaucracy [11.2.1]

45. Providing academics and administrators with the skills for effective management of interfaces between academic and administrative activities; teaching and research; and scholarship and research. [11.2.2]

46. Providing the skill and facilities for teaching students with disabilities [12.1.1]

47. Enhancing staff ability to help students move from surface-learning to deep-learning [12.1.2]

48. Enhancing Academic Staff ability to critique publications as basis for improving Research Outputs [12.1.3]

49. Ensuring regular maintenance and investment in Teaching and Research infrastructure [12.1.4]

50. Ensuring effective integration of Academic, Administration, and Support-service activities [12.1.5]

51. Collaboration with Further and other Higher Educational Institutions; Government Departments – including the QAA and HEFCE; and other local, regional, national and international Public Sector organisations [12.2.1]

52. Partnerships with local, regional, national, and international Private Sector Organisations in support of Masters, Doctoral and Post-doctoral Programmes and Professorships in applied research [12.2.2]

53. Justification of Strategic Quality Improvement Plans based on Institutional and Departmental priorities, and realistic achievable goals and objectives relating to Teaching and Research [13.1.2]

54. Robust Defence of Long and Short-term Spending Plans relating to Teaching and Research; backed by realistic 3 – 5 year Cash Flow Forecasts [13.1.3]

55. Rationalisation based on Teaching and Research priorities and Cost-Benefit Analysis [13.2.1]

56. Implementation of an Open Bidding Process for Funds under explicit conditions [13.2.2]

57. Budget Centres comprising of Cost Units, Revenue Units, Profit Units working as a Team [13.3.1]

58. Activity-based Costing is most appropriate for costing Teaching and Research Quality Improvement Activities for effective management of Teaching and Research Overheads [13.3.2]

59. Ensuring that more staff understood the nature of tasks and activities making up a process, by proper documentation of processes and effective process redesign [14.1.1]

60. Ensure there is a systematic basis for identifying, evaluating and selecting tasks and activities with the required characteristic features to enhance process performance before key teaching and research processes are designed or redesigned [14.1.2]

61. Ensure regular monitoring of process performance to make it less difficult to hold the framework of core processes together for a long period, and easier to feedback results into the daily process control mechanism [14.2.1]

62. There is an urgent need to reduce Staff Turnover, because, rising Staff Turnover means staff with the relevant skills for effective process management are not always going to be around to sustain initial process improvements achieved, without having to restart the improvement initiative all over again [14.2.2]

63. Job Descriptions should specifically assign particular task or activity to one individual, making it easier to know who exactly is doing what in a group situation [15.1.1]

64. Effective Team leadership, is needed to ensure that tasks are properly matched with individual abilities and skills [15.1.2]

65. There is the need for leadership to give recognition for task well completed, and provide a link between 'task completion' and 'rewards' [15.2.1]

66. Improve Staff Perception that, their immediate superior, examples: Team Leaders, Heads of Department or the Dean of School are capable of rewarding them through pay rises, promotions or improving their working conditions [15.2.2]

67. Ensuring frequent restructuring does not result in frequent changes in Leadership and Policy and Strategy at all levels of the management [16.1.1]

68. Ensure proper timing of decisions to discontinue a Programme or an improvement initiative because of continuous lose of teaching and research revenue [16.1.2]

69. Sustain commitment from the Chancellery, Deanery, and Heads of Departments to Continuous Funding of Programmes or improvement initiatives, through regular maintenance and increased investment in teaching and research infrastructure [16.2.1]

70. Reduce Budgetary Deficits through efficient management of budgetary allocations [16.2.2]

71. The need to ensure that Regulations are clear enough for all undergraduate students [17.1.1]

72. Regulations should be varied to meet the need of the diverse student population. To do this effectively requires input from Teaching and Research Staff, Administrative and Support-service Staff, and representative of Students' Unions [17.1.2]

73. Complaints procedures should be harmonised, less bureaucratic [17.2.1]

74. Pastoral Care Systems should deal effectively with areas students are most interested in, such as: students finances, staff-students relationships, health and safety, socialisation – including anxieties and fears of students in particular the young, disabled, from overseas, with language difficulties [17.2.2]

75. The need to effectively manage serious academic offences and appeals relating to examinations and assignments results, and research supervision at undergraduate and post-graduate levels [17.2.3]

76. Results from Students Satisfaction Surveys should be incorporated into improvement policy and strategy on timely basis [18.1.1]

77. Providing the budgetary allocations that will ensure that managers and leaders have the ability to prioritise the needs and expectations of students [18.1.2]

78. With increasing demand for university places, institutions are should aim at delighting students by exceeding their expectations – which is cost-effective in an excess-demand situation [18.2.1]

79. Financially stability is required in order to strengthen the strategic link between Student Delight and Student Loyalty [18.2.2]

80. Questionnaire should be well designed to capture the 'real' needs and expectations of Students [19.1.1]

81. Institutions should recognise that not all students are able to effectively articulate their needs and expectations [19.1.2]

82. Institutions should combine the use of Questionnaires with Focus Groups of Students and Tutors; and Questionnaire Questions should be a mix of 'open' and 'closed' questions [19.1.3]

83. Policy and Strategy Reviews should be carried out on regular basis for successful implementation of changes [19.2.1]

84. Where there is the need for restructuring, Policy Deployment should be carried out when everyone is in position in the new or emerging structure [19.2.2]

85. Regulations should be clear to reduce misunderstanding and frequent misinterpretation by staff and students [20.1.1]

86. Encouraging managers and leaders to deal with issues of discrimination openly and not offending individual sensitivity at work [20.1.2].

87. Members of Staff who get the opportunity to do what they really want after fighting hard for it within their institutions should be supported and motivated [20.2.1]

88. Top managers should pay serious attention to implementing Equal Opportunity policy and strategy [20.2.2]

89. Problems and Opportunities relating to Teaching and Learning Quality should be well defined, and alternative ways of solving a problem or taking advantage of an opportunity rationally evaluated [21.1.1]

90. Problems and Opportunities relating to Research and Scholarship Quality should be well defined, and alternative ways of solving a problem or taking advantage of an opportunity rationally evaluated [21.1.1]

91. Attempts should be made to reduce over-dependence on Top-down decision-making processes, associated with hierarchical organisational structures. [21.1.2]

92. Staff involvement should be encouraged through active participation in the decision-making process [21.2.1]

93. Staff should get involved in more important decisions affecting their performance and welfare [21.2.2]

94. The Performance Appraisal System (PAS) should be effectively integrated with Performance Management System (PMS) [22.1.1]

95. Impact of Team dynamics on actual performance at work should not be ignored [22.1.2]

96. Procedure for Performance Appraisal Systems (PAS) should be varied sufficiently to take account of the needs of Staff with disabilities or difficulties in a work environment [22.1.3]

97. The need to minimise the impact of 'lobbying' on Staff Promotion and Rewards [22.2.1]

98. The debate about whether the association between performance indicators and rewards is probabilistic or deterministic should be resolved through consensus [22.2.2]

99. Performance Measures and Indicators directly linked to Key Institutional Results e.g. TQA and RAE Measures and Results are ranked second to none, at the expense of measures relating to staff performance [22.2.3]

100. The need to ensure favourable Press commentary on all Environmental Sustainability Projects under taken by the institution [23.1.1]

101. Aggressive reporting of institutional activities is required in order to enhance the preservation and sustainability of natural resources – choice of transportation for staff and students, reduction of waste, economic usage of gas, water, electricity, recycling materials [23.1.2]

102. Institutions should be more aggressive in adopting preventive measures to promote Health and Safety at Work, as part of a preventive approach to quality management [23.2.1]

103. Institutions should be more effective in the management of stress at work. Number of Days off Sick should be effectively monitored and followed up for appropriate action to be taken, in order to control the negative impact of Absenteeism on Staff and Student Morale [23.2.2]

104. Institutions should develop a more successful working relationship with the QAA and HEFCE in order to meet the requirements of Students and Staff with Disabilities more effectively [24.1.1]

105. Institutions should have in place deliberate strategies for dealing with the impact of Widening Participation on Entry Standards; Standards of Awards; Employability of Graduate; Staff Teaching Practices and Staff Morale [24.1.2]

106. Apart from providing employment to the local community, institutions should actively support Sports and Leisure [24.2.1]

107. Institutions should aim at successful collaborations and partnerships with both public and private sector organisations as part of efforts to achieve national and international excellence [24.2.2]

108. Staff at all levels of management and leadership – with responsibility for Teaching and Research Quality Improvement - should be encouraged to belong to reputable Professional Body promoting Teaching, Learning, Scholarship and Research Quality [25.1.1]

109. There is a need to increase the value of intellectual capital by raising the profile of Teaching and Research Staff [25.2.1]

110. The need for institutions to use a comprehensive and balanced set of Financial and Non-financial Measures [26.1.1; 26.2.1]

111. The need for institutions to reverse negative trends in meeting Teaching and Research Budgets [26.1.2; 26.2.2]

112. Institutions should aim at gaining and sustaining outstanding Teaching and Learning Performance against Teaching and Learning Quality Improvement Objectives and Targets [26.1.3; 26.2.3]

113. Institutions should aim at gaining and sustaining outstanding performance levels in Research and Scholarship against Research and Scholarship Quality Improvement Objectives and Targets [26.1.3; 26.2.3]

114. Teaching Quality Assessment (TQA) Results should be linked to Planned Teaching Quality Improvement Exercises, and to Teaching Quality Improvement Policy, Strategy, Objectives and Targets [26.1.3].

115. Research Assessment Exercise (RAE) Results should be linked to Planned Research Quality Improvement Exercises, and to Research Quality Improvement Policy, Strategy, Objectives and Targets [26.1.3; 26.2.4]

116. Serious efforts should be made to effectively integrate 'learning', 'teaching', 'scholarship', and 'research' activities, as part of efforts to improve TQA and RAE Results [26.1.3; 26.2.4]

117. Institutions should aim at meeting their Staff Budgets for a longer period of time, in order to deal more effectively with serious staff retention, and recruitment problems [27.1.1]

118. There is an urgent need to ensure regular supply of teaching resources, to prevent sharp reduction in the number of supplier invoices paid within 30 days [27.1.2]

119. There is the need to effectively manage rising class sizes, stemming from discontinued programmes, frequent restructuring exercised, staff shortages and lack of regular maintenance and increased investment in teaching and research infrastructure [27.2.1]

120. Managers and leaders need to face the fact that fewer assignments and reduced number of face-to-face contacts with Teaching Staff and/or Dissertation Supervisors, is impacting on the Quality of Students Learning Experience [27.2.2]

121. There is the need to make accurate Cash Forecasts for Teaching and Research Quality improvement, during Teaching and Research Quality Planning [28.1.1]

122. Short-term Quality Improvement Plans are should effectively be integrated with Long-term Quality Improvement Plan, to prevent misappropriation of resources and missed opportunities [28.1.2]

123. Leadership of institutions should diversify their sources of funding in order to reduce their over-dependence on Government Funding for increased investment in Teaching and Research Infrastructure [28.2.1]

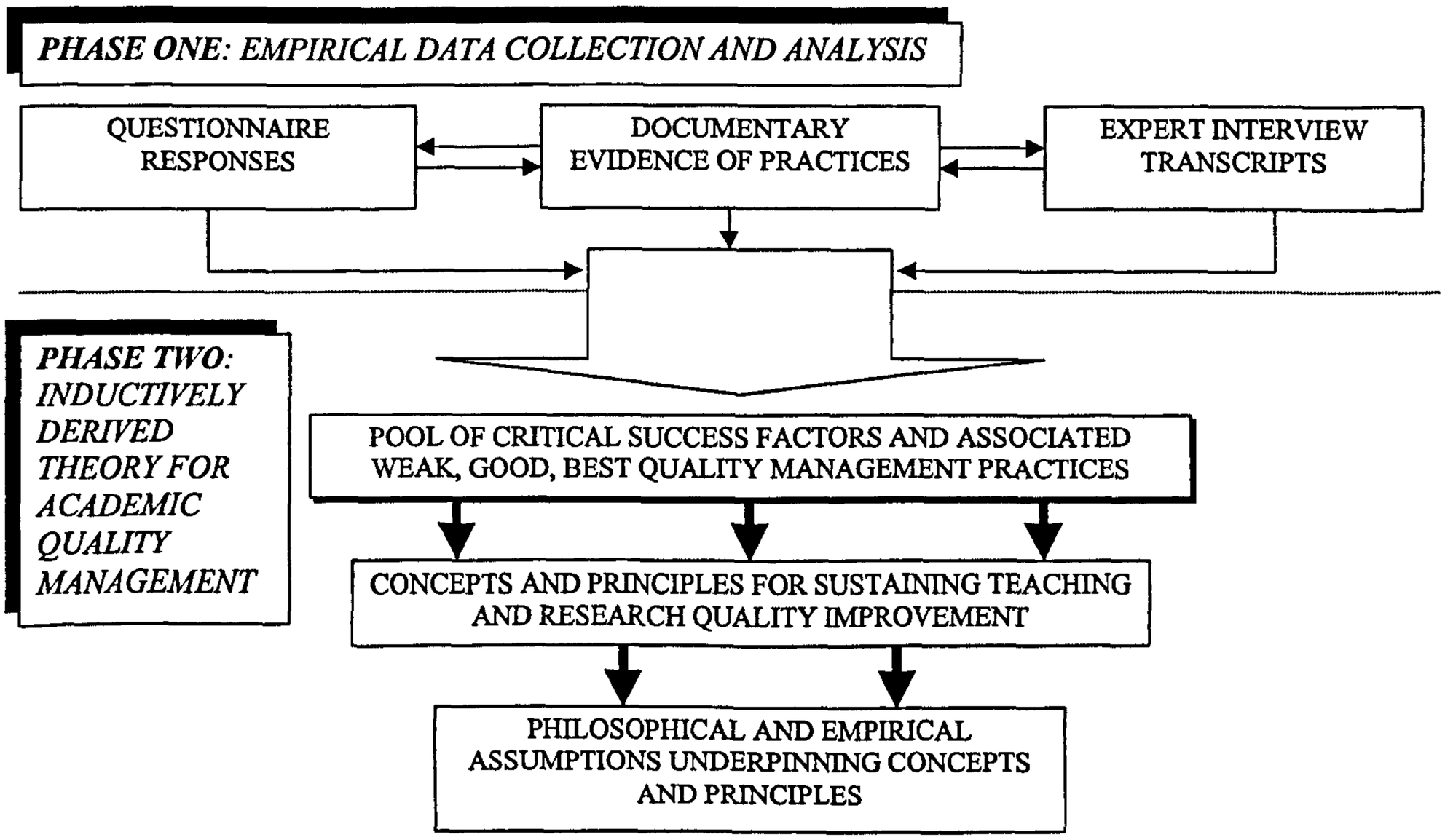
124. Leadership of institutions should be proactive rather than reactive in diversifying their sources of incomes to match the Expenditure outlay for clearing the funding backlog and provide for new infrastructure for improving teaching and research quality [28.2.1]

125. There is urgent need for deliberate strategies to deal with the backlog in funding for teaching and research infrastructure, as part of a long-term Quality Improvement Plan [28.2.2]

APPENDIX: D1

FROM EMPIRICAL DATA ANALYSIS THROUGH THEORY CREATION TO MODEL DEVELOPMENT

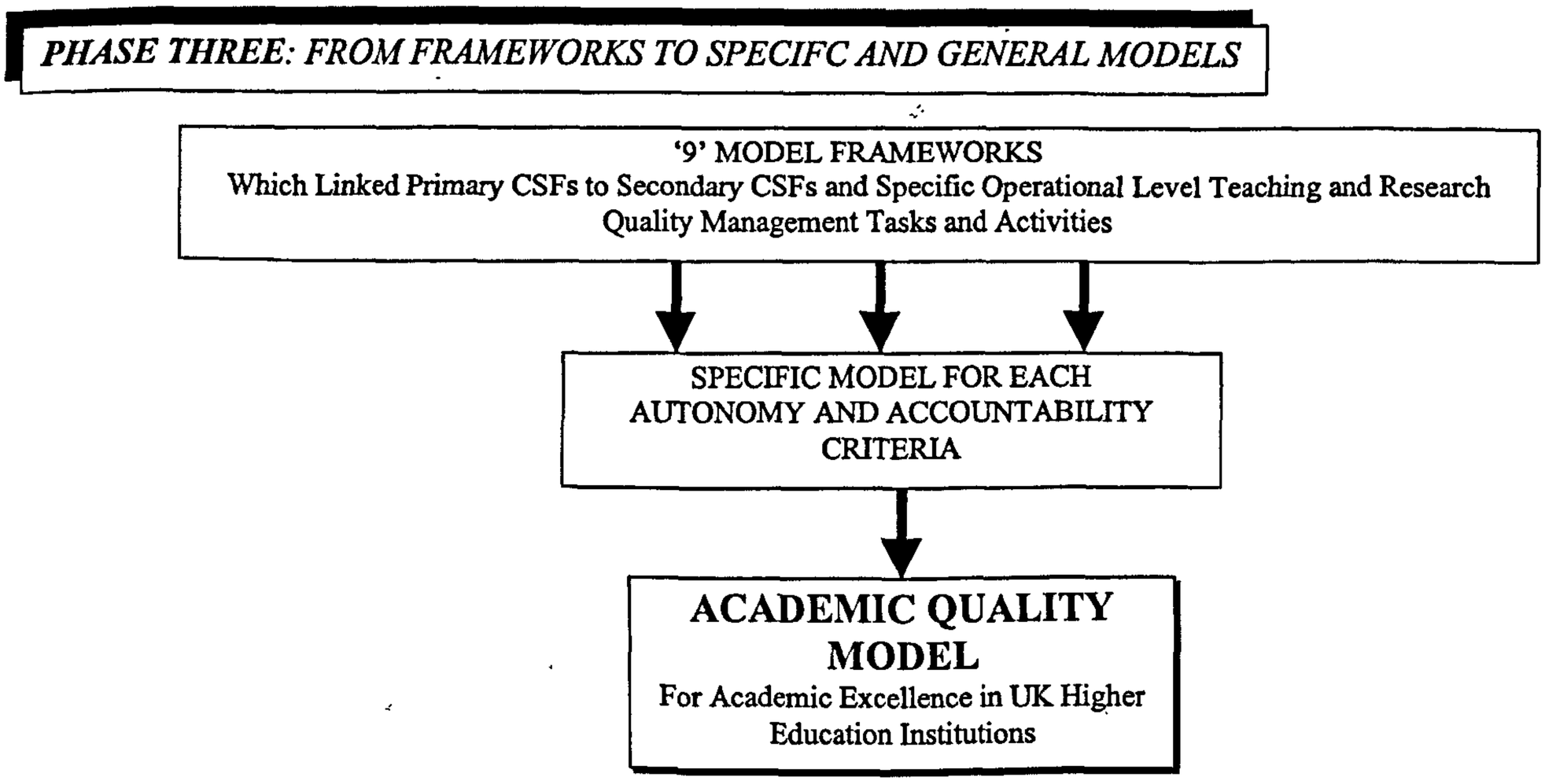
Source: Osseo-Asare Jr. 2003



APPENDIX: D - CONTINUATION

FROM EMPIRICAL DATA ANALYSIS THROUGH THEORY CREATION TO MODEL DEVELOPMENT

Source: Osseo-Asare Jr. 2003

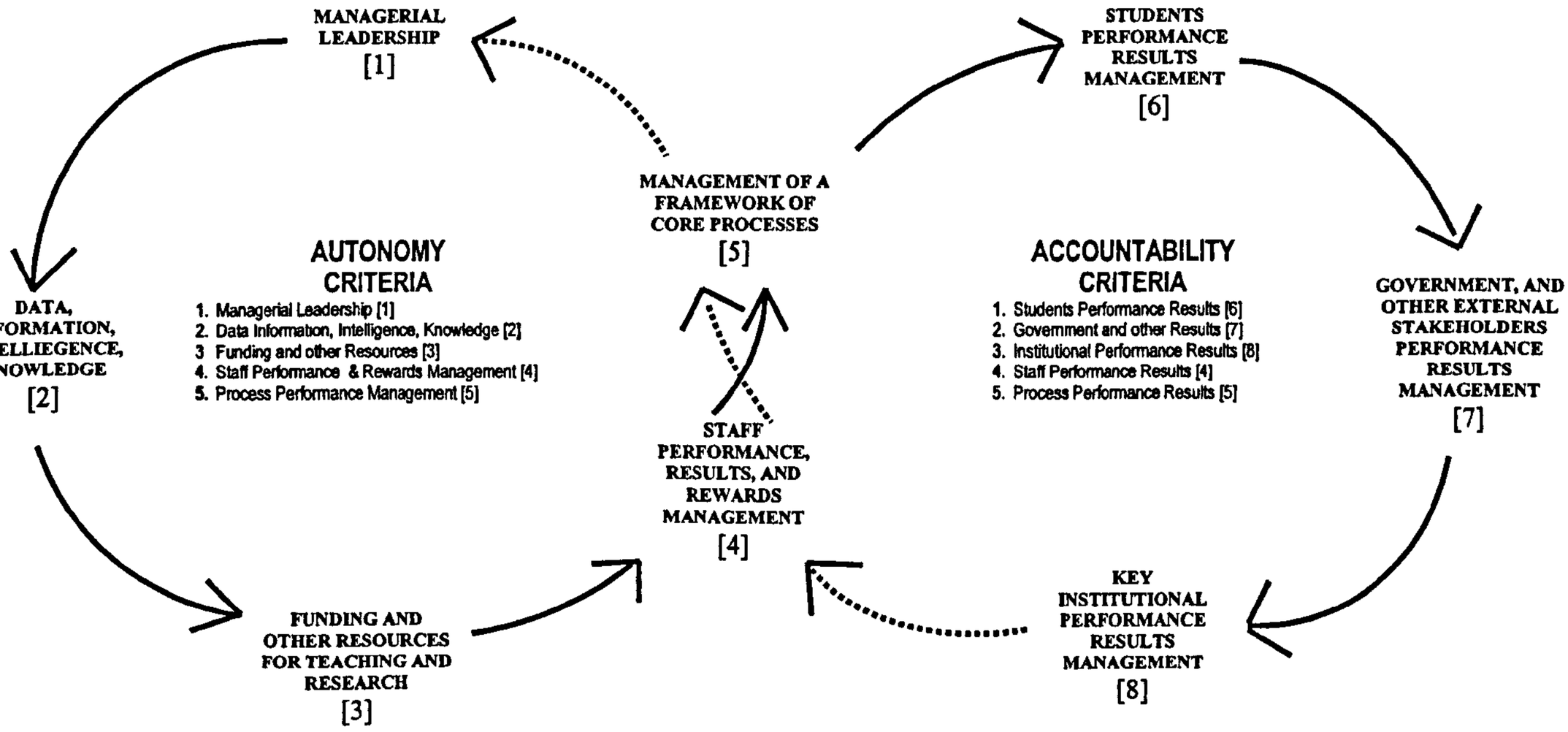


APPENDIX: D - CONTINUATION

FROM EMPIRICAL DATA ANALYSIS THROUGH THEORY CREATION TO MODEL DEVELOPMENT

Source: Osseo-Asare Jr. 2003

PHASE FOUR: THE STRUCTURE OF THE ACADEMIC QUALITY MODEL

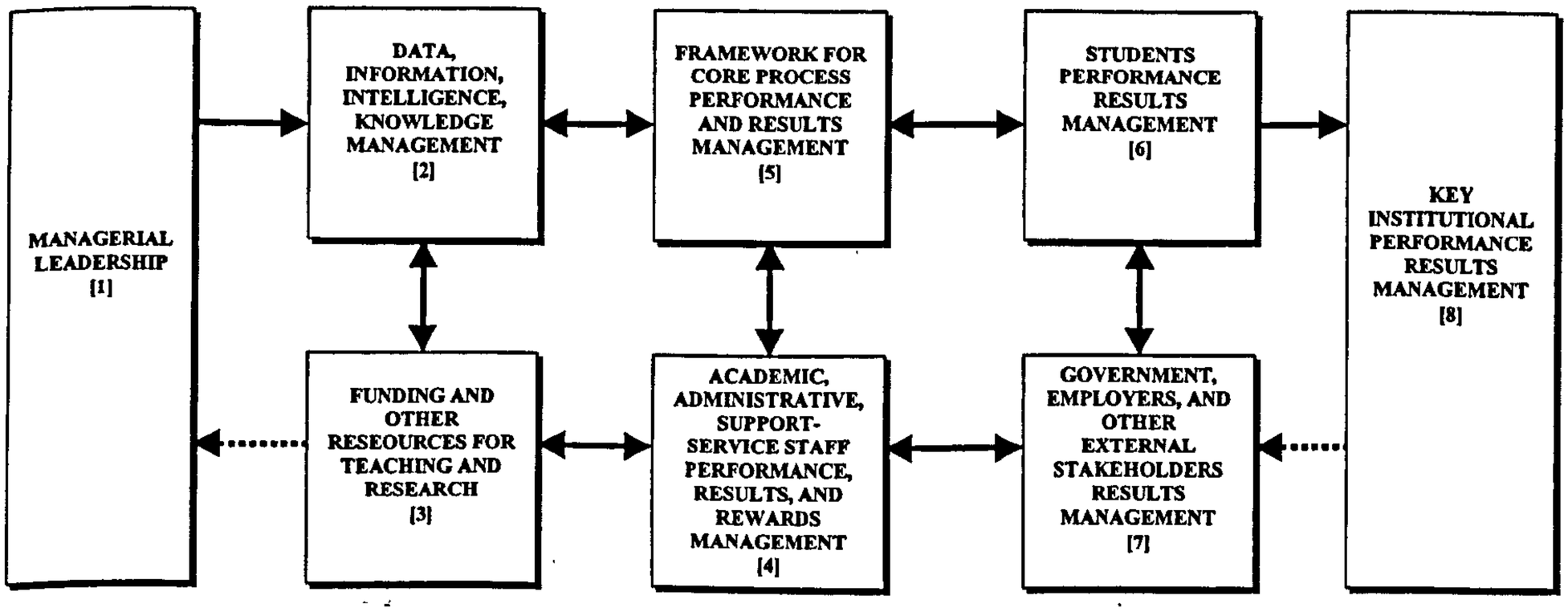


APPENDIX: D - CONTINUATION

FROM EMPIRICAL DATA ANALYSIS THROUGH THEORY CREATION TO MODEL DEVELOPMENT

Source: Osseo-Asare Jr. 2003

PHASE FIVE: SIGNIFICANCE OF CONTRIBUTION TO KNOWLEDGE – TOWARDS A HIGHER EDUCATIONAL VERSION OF THE EFQM EXCELLENCE MODEL



APPENDIX: D2
Glossary and Publications

• GLOSSARY:

Award Criteria:
Models that become tools and techniques for self-assessment may be used by external bodies who wish to reward organisations for their efforts towards organisational excellence. These external bodies use the criteria underpinning the adopted model as bases for awarding performance excellence. According Dale (1999:30, 431), majority of organisations have no intention in the short term of applying for national or international quality awards, they are simply using the 'award criteria' for the chosen 'model' to assist them in diagnosing the state of health of their improvement process and providing indications of how to achieve organisational excellence. It is expected that, the autonomy and accountability criteria underpinning the 'model' developed in this thesis could be used as 'award criteria' if pilot testing and full-scale implementation prove to be very successful.

Continuous quality improvement:
Represents incremental change over a long-term period and not major break-throughs.

Delighting Students:
Performance levels over and above what students' need i.e. exceeding students' expectations.

Deterministic causality:
A relationship between variables in which the outcome of any action can be known in advance i.e. the relationship functions in a particular and specific way and will always do so.

Empirical, empiricism:
Data, information, or knowledge derived from practice not theory or philosophy.

Feedback:
Explicit use of 'outputs' from 'processes' to modify 'inputs' into the system as a whole in such a way as to bring the output nearer to a desired goal or state.

Guru:
In the 'hindu' means 'teacher', used in this thesis to refer to leaders in quality management theory and practice.

Holism, holistic:
An attempt to deal with higher education institutions as wholes rather than sets of parts.

Methodology:
This thesis uses the term 'methodology' to mean a systematic set of research design, methods, and instruments for studying critical issues and/or research problems. It is a process for collecting relevant data into to answer specific research questions and ultimately achieve a specified research objectives.

Models:
In this thesis a 'model' is defined as an abstract representation of reality, which presents a picture or framework of what 'ought' to be done or 'what is required'. They are the means of presenting ideas, concepts, principles, pointers and plans in a descriptive, non-prescriptive manner. The model developed in this thesis is therefore not considered as a 'how-to' guide but a guide to action not to be followed slavishly. Indeed, the model and the theory underpinning it need to be pilot tested before full-scale implementation is embarked upon.

Probabilistic causality:
A relationship between variables in which the outcome of any action cannot be known in advance i.e. the relationship functions in an unpredictable way but shows tendencies to behave in a particular way.

Tools and Techniques:
These are the 'hard' elements of quality management, which are defined in this thesis as the means or device for measuring or assessing quality or performance improvement. The term 'self-assessment' is defined by Dale (1999:30), as a comprehensive, systematic, and regular review of an organisation's activities and results referenced against a 'model' of business excellence. Self-assessment using different tools and techniques therefore implies the adoption of a 'model' on which to base the evaluation and diagnosis. There are a number of national and internationally recognised models on which a self-assessment methodology is based. It is expected that the model developed in this thesis after successful pilot testing could become a self-assessment 'tool or technique' - as it stands is essentially conceptual or theoretical.

- **PUBLICATIONS:**

A Publication in the International Journal on Quality Assurance in Education, Volume 10, Number 1, 2002, www.emeraldinsight.com

OSSEO-ASARE JR., A. E. AND LONGBOTTOM, D. (2002)
"The Need for Education and Training in the Use of the EFQM Model for Quality Management in UK Higher Education Institutions", *Quality Assurance in Education,* Vol. 10, No. 1, pp. 26-36.